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Sediment Data

Alberta

Données sur les sédiments

1985

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WATER RESOURCES BRANCH
WATER SURVEY OF CANADA
OTTAWA, CANADA, 1987**

**DIRECTION GÉNÉRALE DES EAUX INTÉRIEURES
ET DES TERRES
DIRECTION DES RESSOURCES EN EAU
DIVISION DES RELEVÉS HYDROLOGIQUES DU CANADA
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PREFACE

This publication was prepared by personnel of the Sediment Survey Section, Water Survey of Canada Division, under the direction of the Director, Water Resources Branch, Department of the Environment, Ottawa.

The basic data were collected and compiled under the supervision of the Regional Chief of the Water Resources Branch at Calgary, Alberta.

The co-operation received from provincial agencies and from other organizations is gratefully acknowledged.

PRÉFACE

Le groupe d'étude des sédiments de la Division des relevés hydrologiques du Canada, sous l'autorité du directeur des Ressources en eau du ministère de l'Environnement, à Ottawa, a préparé la présente publication.

Le chef régional de la Direction des ressources en eau, à Calgary (Alberta), a supervisé la collecte et la compilation des données de base.

Nous remercions vivement les organismes provinciaux, ou autres, pour leur collaboration.

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INTRODUCTION

The Water Resources Branch of the Department of the Environment herein presents for the 1985 calendar year the annual suspended sediment data and a historical data summary for the sediment survey investigations conducted in Alberta by the Water Survey of Canada.

Data on the character and quantity of fluvial sediments provided by sediment survey investigations are intended for use in studies of water quality, environmental impacts, river processes and behaviour, and engineering design.

General introductory information on the sediment survey is included in this publication. Similar information for the associated hydrometric survey is given in the regular publications containing surface water data.

Details on individual stations and related records, as well as recent data that have not yet been published, may be obtained upon application to:

Regional Chief,
Water Resources Branch,
Department of the Environment,
Bag 2909,
Postal Station 'M',
(Room 854,
220-4th Avenue S.E.),
Calgary, Alberta.
T2P 2M7

or to the Director, Water Resources Branch, Department of the Environment, Ottawa, Ontario, K1A 0E7.

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INTRODUCTION

Dans la présente publication de la Direction des ressources en eau du ministère de l'Environnement, on trouvera les données annuelles sur les sédiments en suspension pour 1985 et le sommaire des données chronologiques sur les sédiments, à la suite des études effectuées dans les cours d'eau de l'Alberta par la Division des relevés hydrologiques du Canada.

Les données recueillies sur la nature et l'importance de la charge solide dans les cours d'eau doivent servir aux études portant sur la qualité des eaux, les incidences environnementales, les processus fluviaux, le comportement des cours d'eau et la conception de projets.

La présente publication contient des renseignements généraux préliminaires sur les études des sédiments. Des renseignements semblables sur les études hydrométriques connexes sont contenus dans les publications régulières présentant des données sur les eaux de surface.

On peut obtenir des renseignements supplémentaires sur les stations et les relevés, ainsi que des données récentes non encore publiées, en s'adressant au:

Chef régional
Direction des ressources en eau
Ministère de l'Environnement
Sac postal 2909
Succursale postale 'M'
(Pièce 854,
220, Quatrième avenue S.-E.)
Calgary (Alberta)
T2P 2M7

ou au directeur des Ressources en eau, ministère de l'Environnement, Ottawa (Ontario), K1A 0E7.

SCOPE OF PUBLICATION

Descriptive information about sediment stations is given. This refers to the Location, Latitude and Longitude, Drainage Area and whether the flow is Natural Flow or Regulated Flow (the year that regulation began is given, if known), Type of Gauge and the Total Suspended Sediment Load in Tonnes for the Period of Record is also included. International Gauging Stations are identified and the names of co-operating agencies who supply data are given; unusual conditions at the sediment station that could affect the data results are explained under "Remarks".

This publication contains data on streamflow, instantaneous suspended sediment concentration; daily mean suspended sediment concentration; daily suspended sediment loads; dissolved solids concentration; load summary; particle-size distribution of suspended sediment in percent sand, silt and clay; bed load and bed material; water temperature when samples were collected; type of sampler and the single sampling vertical location.

A historical sediment data summary includes such information as Sampled Concentration Maximum and Minimum; Suspended Sediment Load Maximum Daily and the Total for Period. The Period of Record and the Type of Operation for each year of data are also given. A Summary for the Months of record gives the Period of Record Mean, the Mean for Period of Record and the Standard Error of Mean as a percent.

HISTORY AND OBJECTIVES OF SEDIMENT SURVEYS IN CANADA

In Canada, investigations of sediment transported by streams were first undertaken by individual organizations or agencies in 1948, to meet the needs of federal and provincial agencies for assessment of particular projects. Although the investigations were extended to meet expanding needs after 1948, it was not until 1961 that a systematic survey was undertaken by the Water Resources Branch.

The sediment survey program has the following objectives:

- (1) Collection and provision of data related to sediment transport in Canadian rivers for applications in water resource engineering, water quality and environmental studies.
- (2) Provision of information and advice related to sediment transport.
- (3) Assessment, improvement and standardization of equipment and techniques used in Canada's sediment survey program.

PORTÉE DE LA PUBLICATION

Des données descriptives sont présentées sur les stations d'étude des sédiments. Elles concernent leur emplacement, leurs latitude et longitude, leur bassin versant, la nature de débit (naturel ou régulé, avec indication, le cas échéant, de l'année où la régularisation a commencé, si elle est connue), le type d'instrument de mesure employé et le débit total des sédiments en suspension (en tonnes) pour la période de relevé. Les stations internationales de jaugeage sont indiquées, ainsi que le nom des organismes qui fournissent les données. Des explications concernant des conditions exceptionnelles qui ont pu influencer sur les résultats sont présentées dans la partie « Remarques ».

Cette publication renferme des données sur le débit des cours d'eau, les concentrations instantanées de sédiments en suspension, les concentrations journalières moyennes de sédiments en suspension, les débits journaliers de sédiments en suspension, les concentrations de matières dissoutes, les débits solides totaux (résumés), la granulométrie des sédiments en suspension exprimée en pourcentage de sable, de limon et d'argile, le charriage et les matériaux du lit, la température de l'eau au moment de l'échantillonnage, le type d'échantillonneur employé et l'emplacement des verticales de prélèvement d'échantillons uniques.

Un résumé des données historiques sur les sédiments est inclus. On y trouve divers renseignements comme les concentrations maximale et minimale mesurées, le débit journalier maximal des sédiments en suspension et le total pour la période. La période de relevé et le type d'exploitation des stations sont indiqués pour chaque année. Dans un résumé pour les mois de relevé, on donne la moyenne pour chaque période et pour l'ensemble des périodes de relevé ainsi que l'erreur-type de la moyenne, en pourcentage.

HISTORIQUE ET OBJECTIFS DES ÉTUDES DES SÉDIMENTS AU CANADA

Au Canada, les études dans ce domaine ont débuté en 1948 en réponse aux besoins exprimés par certains organismes fédéraux et provinciaux pour l'évaluation de projets donnés et étaient le fait d'organismes privés. Bien que les études se soient poursuivies après 1948 pour satisfaire aux besoins accrus, ce n'est qu'en 1961 que la Direction des ressources en eau les a entreprises de façon systématique.

Les buts de ces études sont de:

- (1) réunir et produire des données sur les transports solides dans les cours d'eau canadiens, données dont on peut avoir besoin pour des études concernant l'environnement, la qualité des eaux et la conception de projets portant sur les ressources en eau.
- (2) produire des informations concernant les transports solides.
- (3) évaluer, améliorer et uniformiser le matériel et les techniques employés dans le programme d'étude des sédiments au Canada.

PUBLICATION OF SURFACE WATER AND SEDIMENT DATA

Sediment data have been published in a variety of formats since the beginning of the Sediment Survey Program.

During the years 1948 to 1960, some sediment data were collected for several Prairie rivers to meet the needs of particular projects. The first Water Resources Paper series containing sediment data incorporated a selection of these data and also data for part of the year ending September 30, 1961, at stations established for the continuing program. The second issue was a biennial publication covering only the continuing program for the 1962 and 1963 water years. All subsequent editions titled *Sediment Data Canadian Rivers* have been published annually. The sediment data since 1978 have been presented entirely in the International System of Units (SI).

Commencing with 1984, the *Sediment Data* were published in a new format wherein Canada was divided into eight regions. The provinces each represent a separate region except for New Brunswick, Newfoundland, Nova Scotia and Prince Edward Island, which together form the Atlantic Provinces region, and the Yukon and Northwest Territories which make up another. The publications are identified by the province or territories covered and the year in which the data were collected. These data are published annually on a calendar-year basis and the stations are listed alphabetically.

The first edition of a *Sediment Data Reference Index* was published for data to 1972. It contains a tabulation of locations in Canada where sediment data were collected by the Water Survey of Canada. The index has been subdivided alphabetically by province or territory, with sediment survey stations also listed alphabetically. Commencing with the 1978 publication, data are presented in the International System of Units (SI) and will continue to be published biennially. The latest edition supersedes all previous editions because it contains any corrections or additions since the last publication.

The first edition of a new publication series titled *Historical Sediment Data Summary for Canadian Rivers* was produced for data to 1974. This publication contains a summary of historical monthly and annual mean suspended sediment load, and annual extremes of daily suspended sediment concentration and loads and total annual suspended load. Commencing with the 1978 publication, data are presented entirely in the International System of Units (SI). This publication has been discontinued, as much of the information is now included in the new annual *Sediment Data* publication.

PUBLICATION DES DONNÉES SUR LES EAUX DE SURFACE ET LES SÉDIMENTS

Depuis le début du programme d'étude des sédiments, la présentation des données a varié.

De 1948 à 1960, on a recueilli des données pour plusieurs cours d'eau des Prairies en prévision de la réalisation de certains projets. La première publication contenant des données sur les sédiments a paru dans la série intitulée *Water Resources Paper*; elle présentait un choix de ces données ainsi que des données recueillies en 1961 avant le 30 septembre à des stations établies pour la réalisation du programme permanent. La deuxième publication a porté sur les données recueillies dans le cadre du programme au cours des années hydrologiques 1962 et 1963. Par la suite, les données ont été publiées annuellement sous le titre *Données sur les sédiments - rivières canadiennes*. Depuis 1978, les données sont exprimées en unités du Système international (SI).

En 1984, la présentation des *Données sur les sédiments* a été modifiée. Le Canada a été divisé en huit régions, une région pour chaque province, sauf le Nouveau-Brunswick, Terre-Neuve, la Nouvelle-Écosse et l'Île-du-Prince-Édouard qui, ensemble, forment la région des provinces de l'Atlantique, et les Territoires du Yukon et du Nord-Ouest, qui forment une autre région. Les publications sont nommées selon la région couverte et l'année des données (année civile). Ces publications sont annuelles. Les stations y sont présentées par ordre alphabétique.

Un *Index de référence des données sur les sédiments* est publié. La première édition portait sur les données disponibles jusqu'en 1972. Les emplacements où des données sur les sédiments ont été recueillies au Canada par la Division des relevés hydrologiques y sont présentés sous forme de tableau. L'*Index* est subdivisé selon l'ordre alphabétique par province ou territoire, et les stations de mesure des sédiments sont classées par ordre alphabétique. À partir de 1978, les données sont exprimées en unités du Système international (SI). L'*Index* est publié tous les deux ans; l'édition la plus récente annule toutes les éditions antérieures, car elle renferme toutes les corrections et mises à jour effectuées depuis la dernière parution.

Une autre série de publications a porté le titre *Sommaire chronologique des données sur les sédiments de rivières canadiennes*. La première édition renfermait les données disponibles jusqu'en 1974. Cette série présentait un résumé donnant les moyennes mensuelles et annuelles historiques du débit des sédiments en suspension, les valeurs annuelles extrêmes de la concentration journalière et du débit journalier des sédiments en suspension et le débit annuel total des sédiments en suspension. À partir de 1978, les données ont été présentées en unités du Système international (SI). Cette série a été abandonnée, car une bonne partie de l'information est maintenant contenue dans la nouvelle publication annuelle intitulée *Données sur les sédiments*.

COLLECTION AND PROCESSING OF BASIC DATA

1. Equipment and Instrumentation

The sediment survey program of the Water Resources Branch is conducted in cross sections on rivers selected specifically for the sediment survey or for the hydrometric survey. Certain cross sections are located at traffic bridges, while others are equipped with cableways, or automatic pump samplers.

The following sediment samplers have been used in the sediment survey program:

- (a) Depth-integrating suspended sediment wading-type hand sampler, USDH-48, used on small streams or during winter periods.
- (b) Depth-integrating suspended sediment sampler, USDH-59, used as a handline suspension for small and medium size streams.
- (c) Depth-integrating suspended sediment samplers, USD-49, and USD-74, used on a reel suspension for medium and large streams whose depths are less than five metres.
- (d) Point-integrating suspended sediment samplers, USP-61, USP-61-A1, USP-63, and USP-72, used for point-integrating sampling, or depth-integrating sampling if the depth is over five metres, or in a cross section with velocities up to two metres per second.
- (e) Automatic pump sampler is an automatic pumping system permitting unattended collecting and bottling of individual water samples pumped from a fixed point in a stream. This sampler is normally installed at isolated locations where otherwise no data would be available during ice break-up or peak periods.
- (f) Bed material sampler, USBM-54, used on large or deep streams or on those streams with hard-packed streambeds.
- (g) Bed material sampler, USBMH-60, used on some large or deep streams or on those streams with soft-packed streambeds.
- (h) Bed material sampler, USBMH-53, used on some small or shallow streams.
- (i) Lane bed material sampler, a drag-type sampler used on small streams or those with soft streambeds.

2. Hydrometric Surveys

The hydrometric survey includes the standard procedures for observations of water levels, streamflow measurements, water surface slope determinations if required, and observations of water temperature. The streamflow measurements are made in conjunction with the sediment load measurements and conform to the accepted standards of the regular hydrometric survey.

3. Sediment Sampling Program

The following is a summary of the elements associated with the Sediment Sampling Program:

- (a) Periodic measurement of suspended sediment load by the

COLLECTE ET TRAITEMENT DES DONNÉES DE BASE

1. Matériel

L'étude des sédiments réalisée par la Direction des ressources en eau porte sur des sections transversales de cours d'eau choisis spécialement à cette fin ou pour les relevés hydrométriques. Certaines sections sont situées sous un pont, d'autres sont accessibles par téléphérique, ou sont étudiées à l'aide d'un échantillonneur sous pression.

On a utilisé les échantillonneurs suivants:

- (a) L'échantillonneur intégrateur selon la profondeur, type simple, USDH-48, employé dans les cours d'eau peu profonds ou en hiver;
- (b) L'échantillonneur intégrateur selon la profondeur USDH-59, utilisé comme une ligne dans les cours d'eau petits et moyens;
- (c) Les échantillonneurs intégrateurs selon la profondeur USD-49 et USD-74 fixés au bout d'une corde s'enroulant autour d'un moulinet et employés dans les cours d'eau gros ou moyens dont la profondeur est inférieure à cinq mètres;
- (d) Les échantillonneurs intégrateurs USP-61, USP-61-A1, USP-63 et USP-72, employés ponctuellement ou sur toute la verticale, et utilisés lorsque la profondeur est supérieure à cinq mètres ou dans les sections transversales qui connaissent un débit qui atteint 2 m/s.
- (e) Un échantillonneur automatique permettant le prélèvement en bouteilles, sans surveillance, d'échantillons uniques d'eau obtenus à l'aide d'une pompe en un point précis d'un cours d'eau; il est ordinairement installé dans un endroit isolé où aucune donnée ne pourrait être obtenue autrement au cours de la débâcle ou des périodes de débit de pointe;
- (f) L'échantillonneur USBM-54 employé pour le prélèvement d'échantillons des matériaux du lit dans les cours d'eau importants ou profonds ou dans les cours d'eau dont le fond est dur;
- (g) L'échantillonneur USBMH-60 employé pour le prélèvement d'échantillons des matériaux du lit dans certains cours d'eau importants ou profonds, ou dans les cours d'eau dont le fond est meuble;
- (h) L'échantillonneur USBMH-53 employé pour le prélèvement d'échantillons des matériaux du lit dans certains cours d'eau petits ou peu profonds;
- (i) La drague employée pour le prélèvement d'échantillons des matériaux du lit dans de petits cours d'eau ou dans des cours d'eau dont le fond est meuble.

2. Relevés hydrométriques

Le relevé hydrométrique comprend, entre autres, l'observation de la hauteur des eaux, la mesure du débit de l'eau, la détermination de la pente de la ligne d'eau, si nécessaire, ainsi que l'observation de la température de l'eau. Les mesures du débit de l'eau et du débit des sédiments se font conjointement, suivant les méthodes acceptées.

3. Échantillonnage des sédiments des cours d'eau

L'échantillonnage comporte, en gros, les éléments suivants:

- (a) La mesure périodique du débit des sédiments en suspension par la méthode d'intégration sur toute la profondeur

depth-integrating method for determining the average suspended sediment concentration in the cross section.

- (b) Single suspended sediment samples at a selected vertical for determining the sediment concentration for the days when suspended sediment load measurements are not taken.
- (c) Limited measurement of suspended sediment load by the point-integrating method for checking depth-integrated measurements and for determining particle-size distribution in the cross section.
- (d) Sampling of bed material for determining particle-size distribution.
- (e) Periodic measurement of bed load.

The following is a brief explanation of the elements listed above:

(a) *Suspended Sediment Load by Depth-Integrating Method:* Measurements are made by the depth-integrating method to determine the suspended sediment load in the entire cross section of a stream, the average suspended sediment concentration in the cross section, and the size distribution of the sediment particles. It is known that the concentration of suspended sediment tends to increase from the water surface to the streambed and could vary from streambank to streambank.

When making suspended sediment equal-discharge-increment (EDI) measurements, the stream cross section is divided into at least five equal-flow panels and a representative suspended sediment sample is collected from each portion. For each panel of the cross section, the suspended sediment load (r) may then be computed by multiplying the flow (q) by the suspended sediment concentration (c):

$$r = q c$$

The suspended sediment load (R) for the cross section may be computed by adding the sediment loads for the five equal-flow panels:

$$R = r n = q_1 c_1 + q_2 c_2 + \dots + q_n c_n$$

The depth-integrating method of sampling is used to measure the suspended sediment concentration. This method is based on the premise that the sampler fills at a rate proportional to the velocity of the approaching flow, and that by traversing the depth of a stream at a uniform speed, the sampler will receive a portion of water sediment mixture at every point in the vertical.

(b) *Single Suspended Sediment Samples at a Selected Vertical:* Single suspended sediment samples, consisting of two bottles each, are collected routinely using the depth or point-integrating samplers at a permanently fixed vertical in a cross section. During periods of very heavy sediment concentration, two or three single sediment samples may be taken per day, while during periods of low concentration, one single sediment sample may only be taken every few days. During extremely low flow periods, the sampling may be limited to one single sample in several weeks or months.

(c) *Suspended Sediment Load by Point-Integrating Method:* A limited number of suspended sediment load measurements are made by the point-integrating method. These measurements are included in the program (a) to check by comparison the "measured" sediment loads obtained by the depth-integrating method with the suspended sediment loads by the point-integrating method and (b) to obtain samples from which to determine particle-size distribution

pour la détermination de la concentration moyenne dans une section transversale;

- (b) Le prélèvement d'échantillons uniques des sédiments en suspension selon une verticale choisie, afin de déterminer la concentration des sédiments les journées où le débit des sédiments en suspension n'est pas mesuré;
- (c) Un nombre restreint de mesures du débit des sédiments en suspension avec intégration en un point précis d'un cours d'eau, afin de vérifier les résultats des mesures avec intégration selon la profondeur et afin de déterminer la granulométrie des particules de sédiments dans une section transversale d'un cours d'eau;
- (d) L'échantillonnage des matériaux du lit afin d'en déterminer la granulométrie;
- (e) La mesure périodique du charriage.

Voici une brève description des éléments susmentionnés.

(a) *Mesure du débit des sédiments en suspension par intégration selon la profondeur:* La méthode permet de déterminer le débit des sédiments en suspension traversant toute une section transversale d'un cours d'eau, la concentration moyenne des sédiments en suspension dans la section transversale et la granulométrie des sédiments en suspension. C'est un fait connu que la concentration des sédiments en suspension augmente généralement avec la profondeur et qu'elle peut varier d'une rive à l'autre d'un cours d'eau.

Avec la méthode d'incrément de débits égaux (IDE), la mesure du débit des sédiments en suspension se fait en divisant une section transversale d'un cours d'eau en au moins cinq tranches où le débit est égal et en prélevant un échantillon représentatif dans chacune d'elles. Le débit des sédiments en suspension (r) pour chaque tranche se calcule en multipliant le débit (q) par la concentration des sédiments en suspension (c):

$$r = q c$$

Le débit des sédiments en suspension (R) pour la section transversale est la somme des débits des sédiments des cinq tranches:

$$R = r n = q_1 c_1 + q_2 c_2 + \dots + q_n c_n$$

La méthode par intégration sur toute la profondeur est employée pour mesurer la concentration des sédiments en suspension. Elle suppose que l'échantillonneur se remplit à un rythme proportionnel au débit de l'eau et qu'en étant déplacé à une vitesse uniforme sur toute la verticale, il reçoit une partie du mélange eau-sédiments à tous les points de celle-ci.

(b) *Prélèvement d'échantillons uniques de sédiments en suspension sur une verticale choisie:* De tels échantillons, constitués chacun de deux bouteilles, sont prélevés régulièrement à l'aide d'appareils intégrateurs, selon la profondeur ou ponctuels, sur une verticale permanente d'une section transversale. Lorsque la concentration des sédiments est très forte, deux ou trois échantillonnages peuvent être effectués chaque jour, alors qu'un seul échantillon peut être prélevé à quelques jours d'intervalle lorsqu'elle est faible. Au cours des périodes où le débit est extrêmement faible, l'échantillonnage peut être limité à un échantillon toutes les quelques semaines ou tous les quelques mois.

(c) *Mesure du débit des sédiments en suspension par la méthode ponctuelle:* Un nombre limité de mesures du débit des sédiments en suspension sont faites avec cette méthode. On y a recours a) pour vérifier les valeurs du débit mesurées au moyen de la méthode précédente et b) pour obtenir des échantillons en vue de déterminer la granulométrie des sédiments en divers points de la

at different points in the cross section. The point-integrating sediment loads are computed by graphical methods.

The relationship between the suspended sediment concentration of the single vertical samples and the average concentration in the cross section determined from the suspended sediment load measurements is established for some stations. Using this relationship, the sediment concentrations of the single vertical samples are adjusted to reflect the average suspended sediment concentration in the cross section. These average sediment concentrations in the cross sections are plotted, and a smooth curve is drawn through the points to obtain a concentration graph. This graph represents the average suspended sediment concentration for the period of record. The daily mean concentrations are determined by automated procedures using a digitizer interfaced with a Digital minicomputer.

The daily suspended sediment loads are computed on the basis of stream discharges and the collected suspended sediment concentrations. The daily suspended sediment loads are expressed in tonnes per day and are obtained by multiplying the daily mean sediment concentration (mg/L), by the daily mean discharge (m^3/s), and the conversion factor, 0.0864.

(d) *Bed Material Sampling*: In a cross section, bed material samples are usually taken in the same sampling verticals as the suspended sediment samples. Often, additional bed material samples are collected at the water edge, the extreme water level or at other points in the cross section. The total number of bed material samples taken in a cross section usually varies between five and nine.

(e) *Bed Load Measurement*: There are several methods available for measurement of bed load (volumetric method, measurement by samplers, method of tracers, method of constricted cross section, study of sound waves, etc.). The measurement methods should be selected in accordance with river regime.

4. Total Sediment Load

Sediment transport may be divided into two categories: sediment maintained in suspension in the stream (suspended load), and sediment being carried along the streambed (bed load). To measure the total sediment load, each of these must be measured separately and then totalled. The total sediment load was not computed for this publication.

5. Sediment Survey Laboratories

The Water Resources Branch maintain sediment survey laboratories in New Westminster, British Columbia; Regina, Saskatchewan; Guelph, Ontario; and Moncton, New Brunswick. The laboratories are equipped to perform the following analyses:

- (a) determination of sediment concentration by (1) filtration method, (2) evaporation method and (3) determination of total dissolved solids by evaporation method.
- (b) particle-size distribution analysis by (1) bottom withdrawal tube method, (2) sieving and (3) hydrometer method.

Determination of the sediment concentration by the evaporation method is carried out by evaporating the water from the settled sediment sample, with the results being corrected for dissolved solids. The quantity of dissolved solids is determined by evaporating a portion of the decanted water of a sample. In the filtration method, the suspended sediment concentration of water samples is determined by utilizing Gooch crucibles with a Reeve Angel 934AH filter and a Millipore AP20 prefilter and a vacuum system.

section transversale. Cette méthode fait appel à des graphiques pour le calcul du débit des sédiments.

Le rapport entre la concentration des sédiments en suspension dans les échantillons prélevés sur une seule verticale et la concentration moyenne dans la section transversale, telle que déterminée à partir des mesures du débit des sédiments en suspension, est établi pour quelques stations. Il permet de corriger les concentrations mesurées à une seule verticale de manière à donner la concentration moyenne dans la section transversale. Les concentrations moyennes ainsi déterminées sont reportées sur un graphique, et une courbe lisse passant par les points marqués est tracée. Le graphique obtenu représente la concentration moyenne des sédiments en suspension pour la période de relevé. Les concentrations moyennes quotidiennes sont déterminées automatiquement à l'aide d'un convertisseur analogique-numérique relié à un mini-ordinateur numérique.

Les valeurs journalières du débit des sédiments en suspension sont calculées à partir du débit du cours d'eau et des concentrations des sédiments en suspension recueillis. Elles sont exprimées en tonnes par jour. On les détermine en multipliant la concentration moyenne journalière des sédiments (mg/L) par le débit moyen journalier (m^3/s) et par un facteur de conversion approprié, 0.0864.

(d) *Échantillonnage des matériaux du lit*: Dans une section transversale, les échantillons des matériaux du lit sont ordinairement prélevés aux mêmes verticales que ceux des sédiments en suspension. Souvent, des échantillons supplémentaires sont pris près des rives, là où le niveau d'eau est extrême et à d'autres points de la section transversale. Leur nombre total pour une section donnée varie ordinairement entre cinq et neuf.

(e) *Mesure du charriage*: La mesure peut se faire par plusieurs méthodes (méthode volumétrique, mesure à l'aide d'échantillonneurs, méthode des traceurs, méthode de la section transversale rétrécie, étude des ondes sonores, etc.). Le choix se fondera sur la nature du régime du cours d'eau.

4. Débit solide total

Il y a deux catégories de sédiments: les sédiments maintenus en suspension au sein de l'eau (sédiments en suspension), et les sédiments charriés sur le lit d'un cours d'eau (charriage de fond). Les deux types de sédiments doivent être mesurés séparément et leurs valeurs additionnées si on veut mesurer le débit total des sédiments. Toutefois, on ne l'a pas calculé aux fins de la présente publication.

5. Laboratoires d'analyse

La Direction des ressources en eau possède des laboratoires d'analyse des sédiments à New Westminster (Colombie-Britannique), Regina (Saskatchewan), Guelph (Ontario) et Moncton (Nouveau-Brunswick). Les laboratoires disposent des appareils nécessaires pour effectuer les analyses suivantes:

- (a) la détermination de la concentration des sédiments par (1) filtration, (2) évaporation, et (3) détermination des matières dissoutes totales par évaporation.
- (b) l'analyse granulométrique (1) par extraction des sédiments déposés dans un tube, (2) par l'emploi de tamis et (3) par l'utilisation d'un hydromètre.

La méthode par évaporation consiste à faire évaporer l'eau d'un échantillon de sédiments décanté et à corriger les résultats pour tenir compte des matières dissoutes. La quantité de celles-ci est déterminée en faisant évaporer une partie de l'eau de l'échantillon décanté. Dans la méthode par filtration, on utilise sous vide des creusets de Gooch munis d'un filtre Reeve Angel 934AH et d'un préfiltre Millipore AP20.

Particle-size analysis was carried out for some suspended sediment samples having gross weights in the range of 0.15 to 5 g using the Bottom Withdrawal Tube method. The particle-size distribution of the Bottom Withdrawal Tube method ranges from 0.002 to 1.000 mm. The Sieve analysis method may be used for samples with a large amount of material coarser than 0.062 mm.

The particle-size classification used in this report agrees with recommendations made by the American Geophysical Union Subcommittee on Sediment Terminology. The classification is as follows:

Classification	Size (mm)
Clay	0.000 24 - 0.004
Silt	0.004 - 0.062
Sand	0.062 - 2.0
Gravel	2.0 - 64.0

The particle-size distributions given in this report are not necessarily representative of all particles in transport in the stream. Most of the organic material is removed and the sample is subjected to mechanical and chemical dispersion before analyzed in distilled water. Chemical dispersion is not used for native-water analysis.

6. Accuracy and Reliability of Field Data and Computed Results

The overall accuracy and degree of reliability of the sediment data is dependent upon many factors. Some of the more important of these are:

- (a) accuracy and reliability of streamflow records;
- (b) regime of the river;
- (c) type of sampling equipment used to collect the suspended sediment samples;
- (d) frequency of suspended sediment discharge measurements;
- (e) frequency of individual sampling;
- (f) quality of the relationship between the average suspended sediment concentration in the cross section and the concentration of the individual samples;
- (g) frequency and method of bed material sampling;
- (h) frequency and method of bed load measurements;
- (i) accuracy and reliability of the laboratory analysis;
- (j) selected methods of computation of the suspended sediment discharge;
- (k) interpretation and extrapolation of sediment records.

An assessment of the quality of the records can be made by an examination of the occurrence of the symbol (S) on the daily mean concentrations.

In general, data collected during open-water periods are more reliable than those collected during periods of ice conditions or those records obtained by estimation. Further, water level data collected utilizing a water-stage recorder are more reliable and accurate than those using a manual gauge only, especially for small or flashy streams.

Une analyse granulométrique a été effectuée pour certains échantillons de sédiments en suspension ayant un poids brut dans l'intervalle de 0.15 à 5 g par la méthode de la burette (extraction des sédiments déposés, à divers intervalles). La distribution de la taille des particules déterminée par cette méthode varie de 0.002 à 1.000 mm. La méthode de tamisage peut être employée pour les échantillons ayant une forte quantité de particules de taille supérieure à 0.062 mm.

La classification granulométrique qui est utilisée dans la présente publication est conforme aux recommandations faites par l'*American Geophysical Union Subcommittee on Sediment Terminology*. La classification est la suivante:

Classification	Taille (mm)
Argile	0.000 24 - 0.004
Limon	0.004 - 0.062
Sable	0.062 - 2.0
Gravier	2.0 - 64.0

La répartition granulométrique qui est fournie dans cette publication, n'est pas obligatoirement représentative de toutes les particules qui sont transportées par un cours d'eau donné. La plupart des matières organiques sont extraites de l'échantillon qui est ensuite soumis à une dispersion mécanique et chimique avant d'être analysé dans de l'eau distillée. La dispersion chimique ne sert pas à l'analyse de l'eau naturelle.

6. Exactitude des données et des résultats

L'exactitude des données sur les sédiments dépend de nombreux facteurs. On peut citer, parmi les plus importants:

- (a) l'exactitude des données sur les débits;
- (b) le régime d'un cours d'eau;
- (c) le type d'appareil d'échantillonnage utilisé pour prélever les échantillons de sédiments en suspension;
- (d) la fréquence des mesures du débit des sédiments en suspension;
- (e) la fréquence des échantillonnages isolés;
- (f) la qualité du rapport entre la concentration moyenne des sédiments en suspension dans une section transversale et la concentration des échantillons isolés;
- (g) la fréquence des échantillonnages des matériaux de fond et la méthode utilisée;
- (h) la fréquence des mesures du charriage de fond et la méthode utilisée;
- (i) l'exactitude des analyses de laboratoire;
- (j) les méthodes de calcul du débit des sédiments en suspension;
- (k) l'interprétation et l'extrapolation des données sur les sédiments.

La qualité des données peut être évaluée d'après la fréquence d'utilisation du symbole (S), avec les données sur la concentration journalière moyenne.

En général, les données recueillies au cours des périodes d'eau libre sont plus sûres que celles qui sont obtenues au cours des périodes de glaces ou par estimation. De plus, les données sur le niveau des eaux qui sont mesurées à l'aide d'un limnigraphe sont plus certaines et plus exactes que celles qui sont mesurées à l'aide d'une jauge manuelle seulement, surtout dans le cas des petits cours d'eau ou des cours d'eau à crues très rapides.

METHOD OF TABULATION OF SEDIMENT DATA

For stations where the suspended sediment load was obtained, the following data are given where available:

1. The table of *Suspended Sediment Load* includes the daily mean discharge in cubic metres per second, the daily mean concentration in milligrams per litre, and the daily suspended sediment load in tonnes per day. The total monthly discharge and total monthly sediment load are also given for each month of record.

For stations where the sediment load in tonnes per day are produced for complete or partial years, the *Total Suspended Load* for the period is given in the descriptive information.

For stations where only suspended sediment concentrations are obtained, the table of *Suspended Sediment Load* will not be given.

Additional descriptive information about the sediment station is also given and will indicate the following, where applicable.

Location — the latitude and longitude co-ordinates of the location of the gauge are given. For stations where the gauge is located an appreciable distance from the discharge measurement section, these co-ordinates give the location of the discharge measurement section.

Drainage area — refers to that area enclosed by a topographic divide such that direct surface runoff from precipitation would drain by gravity into the stream upstream from the location of the station.

Type of Flow — where the flow is known to be natural, this is indicated. The flow of water in many river systems is affected by upstream regulation. In some cases, the extent of this regulation is not known and therefore is not indicated. However, where the regulation is known to be "appreciable", this is indicated as well as the year that the regulation began, if known.

Type of Gauge — refers to the installation or method used to obtain water level or discharge data:

- (a) *Manual* — a non-recording type of gauge from which observations of stage normally are obtained once daily.
- (b) *Recording* — a water-stage recorder from which continuous water levels are obtained on an analog chart. For most International Gauging Stations located in the United States, water level records are obtained utilizing a digital recorder.

International Gauging Station — on waters adjacent to the international boundary, certain gauging stations have been

PRÉSENTATION DES TABLEAUX DE DONNÉES SUR LES SÉDIMENTS

Pour les stations de mesure du débit des sédiments en suspension, les données suivantes sont présentées, pour autant qu'elles sont disponibles:

1. Le tableau concernant le *débit des sédiments en suspension* (The table of *Suspended Sediment Load*) donne le débit journalier moyen de l'eau, en mètres cubes par seconde, la concentration journalière moyenne, en milligrammes par litre, et le débit journalier des sédiments en suspension, en tonnes par jour. Chaque mois les données indiquent également les débits mensuels totaux de l'eau et des sédiments.

Dans le cas des stations où le débit des sédiments, en tonnes par jour, est fourni pour une année complète ou une partie de l'année, le total pour la période est indiqué.

Dans le cas des stations où seule la concentration des sédiments en suspension est obtenue, ce tableau est absent.

Des renseignements descriptifs additionnels au sujet de la station sont également présentés. On peut y apporter les précisions suivantes:

Emplacement (Location) — La latitude et la longitude de la station de jaugeage sont indiquées. Dans les cas où l'équipement de mesure est situé à une bonne distance de la section où le jaugeage est effectué, on indique les coordonnées de cette section.

Superficie du bassin versant (Drainage area) — Désigne la zone délimitée par une ligne de faite de sorte que l'écoulement de surface direct provenant des précipitations est entraîné par gravité vers le cours d'eau, en amont de la station.

Type de débit (Type of Flow) — Un débit reconnu comme naturel est indiqué. Le débit de nombreux réseaux hydrographiques est modifié par une régularisation effectuée en amont. Dans certains cas, l'importance de cette régularisation n'est pas connue, et elle n'est donc pas indiquée. Cependant, quand on sait que la régularisation est d'une certaine importance, on l'indique, ainsi que l'année où elle a débuté (si elle est connue).

Type de jauge (Type of Gauge) — Il s'agit des jauges ou des méthodes de jaugeage utilisées pour obtenir les données sur le niveau ou le débit d'un cours d'eau.

- (a) *Manuel (Manual)* — Indique qu'un appareil non enregistreur est employé pour obtenir normalement une fois par jour les données sur le niveau et le débit du cours d'eau.
- (b) *Enregistreuse (Recording)* — Indique qu'un limnigraphe permet de mesurer de façon continue le niveau des eaux qui est tracé sur un graphique. La plupart des stations internationales de jaugeage des États-Unis obtiennent les données sur le niveau des eaux à l'aide d'un enregistreur numérique.

Station internationale de jaugeage (International Gauging Station) — Dans les eaux contiguës aux frontières, on a

designated as "International" and records are approved jointly. Differences between figures published herein and corresponding figures in United States Water Supply Papers are due to variations in automated data processing techniques.

Contributed Data — if data were supplied in their entirety or partially by an outside agency, the name of this co-operating agency is given.

Remarks — contains a statement pertaining to the sediment sample collection.

2. The table of *Instantaneous Suspended Sediment Concentration* for depth-integrating samples includes the following: Date and Time of the sample collection; Water Temperature; Instantaneous Discharge at time of sampling, (if not available the daily mean discharge is given and indicated by a symbol); Single Sampling Vertical location; Dissolved Solids; Percent Sand, Silt and Clay; Type of Sampler used. The particle-size distribution of Sand, Silt and Clay, in percent is given where available.

The Single Sampling Vertical Location is defined by many symbols, which are as follows, where applicable:

DIGITS - 5, 14, 130, etc., is the distance in metres from the initial point
 WERB - Water's Edge RIGHT Bank
 WELB - Water's Edge LEFT Bank
 1QRB - One-quarter the distance FROM the RIGHT Bank
 3QRB - Three-quarters the distance FROM the RIGHT Bank
 1QLB - One-quarter the distance FROM the LEFT Bank
 3QLB - Three-quarters the distance FROM the LEFT Bank
 MID - MID STREAM
 MULT - Composite sediment measurement

For the suspended sediment measurements, the Date; Time; Water Temperature at time of sampling; Discharge computed for each sampling panel; Concentration; Sampling Vertical; Dissolved Solids; Percent Sand, Silt and Clay; Type of Sampler used; and the Particle-size distribution of the Sand, Silt and Clay, in percent is given where available.

3. The table of *Point Integrating Particle-size of Suspended Sediment* includes the following: Date and Time of the sample collection; Water Temperature; Panel Discharge for each sampling vertical; Sampling Vertical; Depth of Sample; Concentration of Sample in milligrams per litre; Dissolved Solids, in milligrams per litre, and the Particle-size distribution in percent of the Sand, Silt and Clay are also given.

désigné certaines stations comme «internationales», et les données obtenues sont approuvées par les pays concernés. Les différences entre les chiffres publiés dans la présente publications et dans les *United States Water Supply Papers* sont dues à des variantes dans les techniques de traitement automatique des données.

Données fournies (Contributed Data) — Lorsqu'un organisme extérieur a fourni toutes les données ou une partie des données, son nom est indiqué.

Remarques (Remarks) — Renseignements au sujet du prélèvement des échantillons de sédiments.

2. Le tableau des *concentrations instantanées de sédiments en suspension* (The table of *Instantaneous Suspended Sediment Concentration*) pour les échantillons obtenus par intégration selon la profondeur comprend: la date et l'heure de prélèvement; la température de l'eau; son débit instantané au moment de l'échantillonnage (s'il n'est pas connu, le débit journalier moyen, avec symbole); l'emplacement de la verticale d'échantillonnage; la concentration des matières dissoutes; les pourcentages de sable, de limon et d'argile; le type d'échantillonneur employé; et la granulométrie du sable, du limon et de l'argile, en pourcentage des particules est donnée lorsqu'elle est disponible.

Le site vertical d'échantillonnage unique est défini par plusieurs symboles dont les suivants dans certains cas :

CHIFFRE - 5, 14, 130, etc., désigne la distance en mètres à partir du point initial
 WERB - Bord de l'eau, rive DROITE
 WELB - Bord de l'eau, rive GAUCHE
 1QRB - Un quart de la distance À PARTIR de la rive DROITE
 3QRB - Trois quarts de la distance À PARTIR de la rive DROITE
 1QLB - Un quart de la distance À PARTIR de la rive GAUCHE
 3QLB - Trois quarts de la distance À PARTIR de la rive GAUCHE
 MID - MI-DÉBIT
 MULT - Mesure des sédiments mixtes

Pour les mesures des sédiments en suspension, la date, l'heure, la température de l'eau au moment de l'échantillonnage, le débit calculé pour chaque tranche de la section d'échantillonnage, la concentration et la verticale d'échantillonnage, la concentration des matières dissoutes; les pourcentages de sable, de limon et d'argile; le type d'échantillonneur employé; et la granulométrie du sable, du limon et de l'argile, en pourcentage des particules est donnée lorsqu'elle est disponible.

3. Le tableau de la *granulométrie des échantillons ponctuels et intégrés des sédiments en suspension* (The table of *Point Integrating Particle-size of Suspended Sediment*) comprend: la date et l'heure de prélèvement de l'échantillon, la température de l'eau, le débit de la tranche de la section pour chaque verticale d'échantillonnage, la verticale d'échantillonnage, la profondeur de l'échantillon, la concentration des échantillons, en milligrammes par litre, la concentration des matières dissoutes, en milligrammes par litre, et granulométrie du sable, du limon et de l'argile.

4. The table of *Bed Load Particle-size* includes the following: Date and Time of the sample collection; Panel Discharge; Sampling Vertical and the Type of Sampler used in the collection of the sample and the Particle-size distribution, in percent, for each sample of bed load collected.
 5. The table of *Bed Material Particle-size* includes the following: Date and Time of the sample collection; Panel Discharge; Sampling Vertical and the Type of Sampler used in the collection of the sample and the Particle-size distribution, in percent, for each sample of bed material collected.
 6. The table of *Historical Sediment Data Summary* gives the following, for the period of record, where applicable.
 - (a) Record Summary
 - (b) Type of Sampling
 - (c) Sampled Concentration, maximum and minimum
 - (d) Suspended Sediment Load, maximum daily and the total, for the period, in tonnes
 - (e) Summary, including mean load, the historical mean load and the standard error of the mean in percent.
-
- (a) The *Record Summary* gives the months of record that data are available. If the complete month is on file the symbol (C) is shown, while partial months of data are indicated by the symbol (P). Months with no data on file are indicated by (-).
 - (b) The *Type of Sampling* indicates the type of sampling method used to collect the sediment samples during the period of operation. If the samples were collected by manual methods this is indicated by "MANUAL." If the samples were collected by a pump sampler or some other automatic method this is indicated by "AUTO." If both manual and automatic sampling methods were used this is indicated by "DUAL."
 - (c) The *Sampled Concentration* gives the maximum and minimum concentration, in milligrams per litre, and the date of collection for each year of record. The extreme recorded for the period of record is indicated by an asterisk (*).
 - (d) The *Suspended Sediment Load* gives the maximum daily load, in tonnes, and the date of occurrence. The extreme recorded is indicated by an asterisk (*). The Total for the Period gives the total load for the period or year, in tonnes. The extreme recorded is also indicated by an asterisk (*). A load which has been revised since the previous publication is marked with the symbol (R) for Revision.
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4. Le tableau de la *granulométrie des sédiments charriés* (The table of Bed Load Particle-size) comprend: la date et l'heure de prélèvement de l'échantillon, le débit de la tranche de la section, la verticale d'échantillonnage et le type d'échantillonneur employé et le pourcentage des particules pour chaque échantillon recueilli du charriage.
 5. Le tableau de la *granulométrie des matériaux du lit* (The table of Bed Material Particle-size) comprend: la date et l'heure de prélèvement de l'échantillon, le débit de la tranche de la section, la verticale d'échantillonnage et le type d'échantillonneur employé et le pourcentage des particules pour chaque échantillon recueilli.
 6. Le tableau du *sommaire chronologique des données sur les sédiments* (The table of Historical Sediment Data Summary) donne, pour la période pour laquelle les données sont disponibles, les renseignements suivants lorsque de telles données existent:
 - (a) Le sommaire du relevé
 - (b) Le type d'échantillonnage
 - (c) Les concentrations mesurées, maximum et minimum
 - (d) Le débit des sédiments en suspension, maximum quotidien et le total pour la période en tonnes
 - (e) Résumé, comprend le débit moyen, le débit moyen chronologique et l'erreur type de la moyenne en pourcentage.
-
- (a) Le *sommaire du relevé* donne les mois de relevé pour lesquels les données sont disponibles. Le symbole (C) indique que les données sont disponibles pour tout le mois. Le symbole (P) indique que ces données ne sont disponibles que pour une partie du mois. Enfin, on indique par (-) les mois qui n'ont pas de données.
 - (b) Le *type d'échantillonnage* indique le type de méthode d'échantillonnage que l'on utilise dans le prélèvement des échantillons de sédiments pendant la période d'exploitation. Si le prélèvement des échantillons se fait par des méthodes manuelles, on indique «MANUEL». Si le prélèvement des échantillons se fait au moyen d'échantillonneur à pompe ou par quelque autre méthode automatique, on indique «AUTO». Si on utilise à la fois des méthodes d'échantillonnage manuelles et automatiques, on indique «DOUBLE».
 - (c) Pour les *concentrations mesurées* (Sampled Concentration), on donne la concentration maximale et la concentration minimale, en milligrammes par litre, et leur date d'obtention pour chaque année de relevé. La valeur extrême enregistrée est indiquée par un astérisque (*).
 - (d) Sous le *débit des sédiments en suspension* (Suspended Sediment Load), on donne le débit journalier maximal, en tonnes, et sa date de mesure. Le débit extrême enregistré est indiqué par un astérisque (*). Le débit total pour la période ou pour l'année est indiqué. La valeur extrême est également signalée par un astérisque (*). La lettre R indique qu'une valeur du débit a été révisée depuis la dernière publication.

- (e) The Summary gives the Mean Load and the Historical Mean Load in tonnes.

The Standard Error of the Mean % is calculated using the following equations:

$$SEM = \frac{S}{\bar{x} \sqrt{n}} \times 100\%$$

and

$$S = \sqrt{\frac{\sum (x - \bar{x})^2}{n - 1}}$$

where SEM is the Standard Error of the Mean.

S is the Standard Deviation of the annual mean loads.

x is the annual Mean Load variable.

$\bar{x}$ is the Historical Mean Load or the arithmetic mean of the annual Mean Loads.

n is the number of years for which there is an annual Mean Load.

For stations with only instantaneous samples, this table will not include the *Suspended Sediment Load* or the statistical information in the Summary.

CO-OPERATION AND ACKNOWLEDGMENTS

Co-operative undertakings with other agencies form an important part of the activities of the Water Survey of Canada. Close co-operation has been maintained with public agencies and private organizations concerned with water resources. Data have been mutually exchanged and suspended sediment collection operations have been facilitated by the assistance received from a number of organizations.

On waters adjacent to the International Boundary, certain sediment stations are maintained by Canada (or the United States) under agreement with the United States (or Canada) and the records are collected and compiled in a manner equally acceptable to both countries. These stations are designated as "International Gauging Stations" in this publication.

For the valuable assistance and co-operation received in obtaining sediment survey records, the Water Survey of Canada is indebted to other federal and provincial organizations which are noted as contributing agencies in the summary for the year. A list of these agencies may be found in the *Sediment Data Reference Index*.

MICROFICHE

All sediment data are available in metric units on microfiche, upon request. The data are stored in station number order by province. There are 270 frames per microfiche at 48X reduction; there is a visible heading showing the fiche number, type of data, province, beginning and ending station number and year of data, and the month/year the fiche was created. The last frame is an index of the contents of that fiche.

- (e) Le résumé donne le débit moyen et le débit moyen chronologique, en tonnes.

L'erreur-type de la moyenne % (Standard Error of the Mean), est calculée à l'aide des équations suivantes:

$$SEM = \frac{S}{\bar{x} \sqrt{n}} \times 100\%$$

et

$$S = \sqrt{\frac{\sum (x - \bar{x})^2}{n - 1}}$$

où SEM est l'erreur type de la moyenne.

S est l'écart type des débits moyens annuels.

x est la variable du débit moyen annuel.

$\bar{x}$ est le débit moyen chronologique ou la moyenne arithmétique des débits moyens annuels.

n est le nombre d'années où il y a un débit moyen annuel.

Dans le cas des stations ne prélevant que des échantillons instantanés, ce tableau ne donnera pas le *débit des sédiments en suspension* ni les données statistiques du résumé.

COOPÉRATION ET REMERCIEMENTS

Le travail entrepris en coopération avec d'autres organismes représente une partie importante des activités de la Division des relevés hydrologiques du Canada. On a maintenu une étroite collaboration avec les organismes, publics ou privés, qui s'intéressent aux ressources en eau. On a échangé des données sur les sédiments, et l'assistance fournie par certains organismes a facilité les opérations d'échantillonnage des sédiments en suspension.

Dans les eaux adjacentes à la frontière internationale, les stations dépendent du Canada ou des États-Unis selon l'accord intervenu entre les deux pays, et les relevés sont faits et compilés de façon à satisfaire les deux pays. Ces stations sont nommées « Stations internationales de jaugeage » dans la présente publication.

La Division des relevés hydrologiques du Canada est redevable à plusieurs organismes fédéraux et provinciaux, dont les noms apparaissent dans le sommaire de l'année, de l'aide et de la collaboration qu'ils lui ont apportées pour l'obtention des données sur les sédiments. On trouvera également les noms des organismes qui ont fourni des données dans l'*Index de référence des données sur les sédiments*.

MICROFICHE

Toutes les données sur les sédiments sont disponibles sur microfiche en unités métriques. Ces données sont emmagasinées par ordre de numéro de station et par province. Chaque microfiche renferme 270 pages réduites de 48X. L'en-tête indique le numéro de la fiche, le genre de données, la province, le numéro de la première et de la dernière station, la première et la dernière année des données ainsi que le mois et l'année de création de la fiche. La dernière image donne l'index de la fiche.

DEFINITION OF TERMS

The following definitions are given to clarify the terms used in this publication:

Automatic pump sample is an individual water-sediment mixture pumped from a fixed point in a stream.

Bed load is that material moving in almost continuous contact with the streambed, being rolled or pushed along the bottom by the force of the water.

Bed material is the sediment mixture of which the streambed is composed.

Daily load is the suspended sediment load expressed in tonnes for a particular day. The daily load is obtained by multiplying the daily mean sediment concentration (mg/L) by the daily mean discharge (m^3/s) and the conversion factor, 0.0864.

Daily mean concentration is a time-weighted mean value and is computed from a manually constructed concentration curve. The mean concentration value may be determined arithmetically or graphically. The arithmetic mean is obtained either by (1) selecting values from the concentration graph that represents uniform intervals of time and taking the arithmetic average or by (2) selecting values from the graph that represent unequal intervals of time and weighing these values by the time intervals represented by the concentrations. For graphical explanation refer to *Office Procedures for Sediment Data Computations* and for the automated graphical explanation refer to *Automated Hydrometric Computation Procedures*.

Depth-integrated sediment sample is a suspended sediment sample collected at a single vertical in a cross section in a sampler moving vertically at a constant transit rate and represents an average sample for that part of the depth ranging from the water surface to about nine centimetres above the streambed.

Instantaneous suspended sediment sample is a sample collected at a fixed vertical in a river cross section.

Measured suspended sediment discharge is the suspended sediment discharge that can be computed from stream discharge and the concentration of sediment determined from depth-integrated sediment samples.

Particle-size analysis is the process of determining the size distribution of particles in a sediment sample.

Point-integrated sediment sample is a sample of the water-sediment mixture taken over a specified period of time at a fixed point and depth in a river cross section.

DÉFINITION DES TERMES

Les définitions suivantes sont présentées afin de faciliter la compréhension des termes utilisés dans la présente publication:

Échantillonnage automatique à l'aide d'une pompe (Automatic pump sample): Prélèvement d'un mélange de sédiments et d'eau au moyen d'une pompe fonctionnant automatiquement, en un point précis d'un cours d'eau.

Charriage (Bed load): Matières roulées ou poussées sur le fond sous l'action de l'eau, mais restant en contact presque permanent avec le fond.

Matériau du lit (Bed material): Mélange de sédiments composant le lit d'un cours d'eau.

Débit journalier des sédiments en suspension (Daily load): Débit des sédiments en suspension exprimé en tonnes par jour, pour une journée donnée. On l'obtient en multipliant la concentration journalière moyenne des sédiments (mg/L) par le débit journalier moyen de l'eau (m^3/s) et le facteur de conversion 0.0864.

Concentration journalière moyenne (Daily mean concentration): Moyenne pondérée en fonction du temps, calculée à partir d'une courbe de la concentration établie manuellement. La valeur de la concentration moyenne peut être déterminée arithmétiquement ou graphiquement. Pour la déterminer arithmétiquement, on peut, soit choisir sur la courbe des valeurs représentant des intervalles uniformes de temps et faire la moyenne arithmétique, soit choisir sur cette courbe des valeurs qui représentent des intervalles inégaux de temps et pondérer ces valeurs en fonction des intervalles de temps correspondants. En ce qui concerne les méthodes graphiques, consulter *Méthodes de bureau pour les calculs de données sur les sédiments* et, pour la méthode automatisée, *Automated Hydrometric Computation Procedures*.

Échantillon intégré sur toute la profondeur (Depth integrated sediment sample): Échantillon des sédiments en suspension prélevé sur une verticale précise d'une section transversale d'un cours d'eau à l'aide d'un échantillonneur se déplaçant verticalement à une vitesse constante; il représente un échantillon moyen des matières en suspension entre la surface de l'eau et environ 9 cm du fond.

Échantillon instantané de sédiments en suspension (Instantaneous suspended sediment sample): Échantillon prélevé à une verticale précise d'une section transversale d'un cours d'eau.

Débit mesuré des sédiments en suspension (Measured suspended sediment discharge): Débit des sédiments en suspension qui peut être calculé à partir du débit du cours d'eau et de la concentration des sédiments déterminée à partir d'échantillons intégrés sur toute la profondeur.

Analyse granulométrique (Particle-size analysis): Détermination de la répartition de la taille des particules dans un échantillon de sédiments.

Échantillon ponctuel et intégré (Point-integrated sediment sample): Échantillon constitué d'un mélange d'eau et de sédiments, prélevé au cours d'une période de temps donnée en un point précis d'une section transversale d'un cours d'eau et à une profondeur donnée.

Sediment is fragmental material which has deposited, eroded or transported by a flowing stream.

Sediment hydrograph is a graph showing the variation of suspended sediment concentration or sediment discharge with respect to time.

Single sample is a sample taken at a selected permanent vertical in a cross section. Two bottles of water-sediment mixture make up each single sample.

Single sampling vertical is a selected permanent vertical in a cross section in which single suspended sediment samples are collected.

Suspended sediment is sediment that moves in suspension in water either as a colloid or through the influence of the upward component of turbulent currents.

Suspended sediment concentration is the ratio of the weight of dry solids in a water-sediment mixture to the volume of the mixture. The units of this ratio are "milligrams per litre" (mg/L).

Suspended sediment load is the quantity of suspended sediment transported through a cross section per unit of time.

Total sediment load is the sum of the suspended sediment load and the bed load.

Unmeasured sediment load is the difference between total sediment load and measured suspended sediment load.

Sédiments (Sediment): Matières fragmentaires qui ont été déposées, érodées ou transportées par un cours d'eau.

Hydrogramme des sédiments (Sediment hydrograph): Graphique représentant la variation de la concentration des sédiments en suspension ou du débit des sédiments en fonction du temps.

Échantillon unique (Single sample): Échantillon prélevé sur une verticale permanente particulière dans une section transversale. Deux bouteilles du mélange eau-sédiments constituent un seul échantillon.

Verticale d'échantillonnage unique (Single sampling vertical): Verticale permanente d'une section transversale où des échantillons uniques de sédiments en suspension sont prélevés.

Sédiments en suspension (Suspended sediment): Matériaux qui se déplacent au sein de l'eau, soit sous forme colloïdale, soit sous l'influence des forces ascendantes des courants turbulents.

Concentration des sédiments en suspension (Suspended sediment concentration): Rapport entre le poids des matières solides sèches contenues dans un mélange eau-sédiments et le volume du mélange. Les unités employées sont les «milligrammes par litre» (mg/L).

Débit des sédiments en suspension (Suspended sediment load): Quantité de sédiments en suspension transportés par unité de temps à travers une section transversale d'un cours d'eau.

Débit total des sédiments (Total sediment load): Somme du débit des sédiments en suspension et du débit charrié.

Débit non mesuré des sédiments (Unmeasured sediment load): Différence entre le débit total des sédiments et le débit mesuré des sédiments en suspension.

REVISIONS

A number of corrections or revisions have been made to previously published data. Many of these were required because of typographical or computational errors which were exposed when the data were stored on magnetic tape and monthly means were re-calculated by computer. Other errors were discovered or different interpretations of basic data were made during the systematic review of historical streamflow data presently underway.

Revisions to daily discharges or sediment data are not published at present. However, those stations where a systematic review has been conducted are identified in the Surface Water Data Reference Index publication. The Historical Streamflow Summary publications contain revisions to monthly and annual mean discharges, and annual extremes of discharge. Revisions, corrections or additions made to discharges and sediment after January 1, 1980, are indicated by an "R" symbol in the data summaries. Detailed information on revisions to historical data is available from the appropriate Regional Chief.

RÉVISIONS

On a corrigé ou révisé des données déjà publiées. Il a été nécessaire d'effectuer plusieurs corrections, car on a relevé des erreurs typographiques ou de calcul lorsqu'on a enregistré les données sur rubans magnétiques et qu'on a recalculé les moyennes mensuelles à l'aide d'un ordinateur. On a aussi relevé d'autres erreurs ou fait des interprétations différentes de certaines données de base au cours de la révision systématique des données historiques sur le débit, actuellement en cours.

Les corrections apportées aux débits journaliers ou aux données sur les sédiments ne sont pas publiées, du moins pour le moment. Cependant, les stations où on a effectué une révision systématique sont indiquées dans l'*Index de référence des données sur les eaux de surface*. Les publications intitulées *Sommaire chronologique de l'écoulement* contiennent des données révisées sur les débits mensuels et annuels moyens et les extrêmes annuels du débit. Les révisions, corrections ou ajouts apportés aux données sur les débits et sur les sédiments après le 1^{er} janvier 1980 sont indiqués par la lettre R dans les résumés des données. On peut obtenir plus de détails sur les révisions en s'adressant au chef régional concerné.

EQUIVALENTS OF MEASURE

The following list of convenient equivalents of measure includes the relationship between imperial units and the International System of Units (SI).

- 1 inch equals 2.54 cm (centimetres)
- 1 foot equals 0.3048 m (metre)
- 1 statute mile equals 1.6093 km (kilometres)
- 1 cm (centimetre) equals 0.393 70 inch
- 1 m (metre) equals 3.2808 feet
- 1 km (kilometre) equals 0.621 37 mile
- 1 acre equals 43 560 square feet
- 1 acre equals 0.404 69 ha (hectare)
- 1 square mile equals 640 acres
- 1 square mile equals 2.5900 km² (square kilometres)
- 1 square mile equals 259.0 ha (hectares)
- 1 ha (hectare) equals 10 000 m² (square metres)
- 1 ha (hectare) equals 2.4710 acres
- 1 km² (square kilometre) equals 0.386 10 square mile
- 1 cubic foot equals 6.2288 imperial gallons
- 1 imperial gallon equals 4.546 09 L (litres)
- 1 imperial gallon equals 1.2010 U.S. gallons
- 1 U.S. gallon equals 0.133 68 cubic foot
- 1 cubic foot equals 0.028 317 m³ (cubic metre)
- 1 m³ (cubic metre) equals 35.315 cubic feet
- 1 dam³ (cubic decametre) equals 1000 m³ (cubic metres)
- 1 dam³ (cubic decametre) equals 1 mm (millimetre) over 1 km² (square kilometre)
- 1 cubic foot per second for one day equals 1.9835 acre-feet
- 1 cubic foot per second for one day covers one square mile to a depth of 0.037 19 inch
- 1 acre-foot equals 1.2335 dam³ (cubic decametres)
- 1 m³/s (cubic metre per second) for one day equals 86.4 dam³ (cubic decametres)
- 1 m³/s (cubic metre per second) for one day covers one square kilometre to a depth of 0.0864 m (metre)
- 1 foot per second equals 0.6818 mile per hour
- 1 mile per hour equals 1.467 feet per second
- 1 m/s (metre per second) equals 3.6 km/h (kilometre per hour)
- 1 km/h (kilometre per hour) equals 0.2778 m/s (metre per second)
- 1 cubic foot per second equals 0.028 317 m³/s (cubic metre per second)
- 1 m³/s (cubic metre per second) equals 35.315 cubic feet per second
- 1 pound equals 0.453 59 kg (kilogram)
- 1 kg (kilogram) equals 2.2046 pounds
- 1 short ton (2000 pounds) equals 0.907 18 t (tonne)
- 1 t (tonne) equals 2204.6 pounds
- degrees Celsius = 5/9 (degrees Fahrenheit - 32)
- degrees Fahrenheit = 9/5 (degrees Celsius) + 32

ÉQUIVALENCES DES UNITÉS DE MESURE

Voici une liste des unités de mesure impériales et leurs équivalences dans le Système international d'unités (SI).

- 1 pouce vaut 2.54 cm (centimètres)
- 1 pied vaut 0.3048 m (mètre)
- 1 mille terrestre vaut 1.6093 km (kilomètre)
- 1 cm (centimètre) vaut 0.393 70 pouce
- 1 m (mètre) vaut 3.2808 pieds
- 1 km (kilomètre) vaut 0.621 37 mille
- 1 acre vaut 43 560 pieds carrés
- 1 acre vaut 0.404 69 ha (hectare)
- 1 mille carré vaut 640 acres
- 1 mille carré vaut 2.5900 km² (kilomètres carrés)
- 1 mille carré vaut 259.0 ha (hectares)
- 1 ha (hectare) vaut 10 000 m² (mètres carrés)
- 1 ha (hectare) vaut 2.4710 acres
- 1 km² (kilomètre carré) vaut 0.386 10 mille carré
- 1 pied cube vaut 6.2288 gallons impériaux
- 1 gallon impérial vaut 4.546 09 L (litres)
- 1 gallon impérial vaut 1.2010 gallon américain
- 1 gallon américain vaut 0.133 68 pied cube
- 1 pied cube vaut 0.028 317 m³ (mètre cube)
- 1 m³ (mètre cube) vaut 35.315 pieds cubes
- 1 dam³ (décamètre cube) vaut 1000 m³ (mètres cubes)
- 1 dam³ (décamètre cube) vaut 1 mm (millimètre) qui couvre 1 km² (kilomètre carré)
- 1 pied cube par seconde pendant un jour vaut 1.9835 acre-pied
- 1 pied cube par seconde pendant un jour couvre un volume d'un mille carré par 0.037 19 pouce
- 1 acre-pied vaut 1.2335 dam³ (décamètre cube)
- 1 m³/s (mètre cube par seconde) pour un jour vaut 86.4 dam³ (décamètres cubes)
- 1 m³/s (mètre cube par seconde) pour un jour couvre un kilomètre carré à une profondeur de 0.0864 m (mètre)
- 1 pied par seconde vaut 0.6818 mille par heure
- 1 mille par heure vaut 1.467 pied par seconde
- 1 m/s (mètre par seconde) vaut 3.6 km/h (kilomètres par heure)
- 1 km/h (kilomètre par heure) vaut 0.2778 m/s (mètre par seconde)
- 1 pied cube par seconde vaut 0.028 317 m³/s (mètre cube par seconde)
- 1 m³/s (mètre cube par seconde) vaut 35.315 pieds cubes par seconde
- 1 livre vaut 0.453 59 kg (kilogramme)
- 1 kg (kilogramme) vaut 2.2046 livres
- 1 tonne courte (2000 livres) vaut 0.907 18 t (tonne)
- 1 t (tonne) vaut 2204.6 livres
- degrés Celsius = 5/9 (degrés Fahrenheit - 32)
- degrés Fahrenheit = 9/5 (degrés Celsius) + 32

ALBERTA

ATHABASCA RIVER AT EMBARRAS AIRPORT - STATION NO. 07DD001

INSTANTANEOUS SUSPENDED SEDIMENT FOR 1985

DATE	TIME	WATER TEMP. (C)	INSTANT. DISCHARGE (m³/s)	SINGLE SAMPLING VERTICAL (m)	TYPE OF SAMPLER	INSTANT. CONCENT. (mg/L)	DISSOLVED SOLIDS (mg/L)	PERCENT FINER THAN INDICATED SIZE, IN MILLIMETRES										PERCENT SAND SILT CLAY			
								.002	.004	.008	.015	.031	.062	.125	.250	.500	1.00	2.00	SAND	SILT	CLAY
MAY 05	10:00	4.0			D49	1410	179	20	27	41	55	75	95	99	100				5	88	27
MAY 06	10:00	5.0			D49	1380	180	18	28	39	53	74	95	99	100				5	87	28
MAY 07	10:00	8.0			D49	1370	183	20	27	41	52	75	95	100				4	89	27	
MAY 08	10:00	8.0			D49	952	175	25	45	57	80	95	98	99	100				2	53	45
MAY 10	10:00	7.0			D49	584	145	28	41	52	77	93	97	98	99	100			3	55	41
MAY 12	10:00	8.0			D49	823	148	25	34	55	72	93	99	99	100	100			1	55	34
MAY 14	10:00	10.0			D49	438	138														
MAY 16	10:00	12.0			D49	452															
MAY 18	10:00	13.0			D49	285															
MAY 20	10:00	14.0			D49	275															
MAY 22	10:00	15.0			D49	234	145														
MAY 24	10:00	14.0			D49	221															
MAY 26	10:00	13.0			D49	177 C															
MAY 28	10:00	13.0			D49	174															
MAY 30	10:00	14.0			D49	219															
JUN 01	10:00	14.0			D49	228	157														
JUN 03	10:00	15.0			D49	204															
JUN 05	10:00	15.0			D49	214															
JUN 07	10:00	16.0			D49	152 C															
JUN 09	10:00	16.0			D49	129															
JUN 11	10:00	16.0			D49	101	147														
JUN 13	10:00	17.0			D49	95															
JUN 15	10:00	17.0			D49	90 C															
JUN 17	10:00	17.0			D49	52															
JUN 19	10:00	18.0			D49	80	159														
JUN 21	10:00	18.0			D49	71															
JUN 23	10:00	18.0			D49	70	153														
JUN 25	10:00	18.0			D49	51															
JUN 27	10:00	17.0			D49	42															
JUN 29	10:00	18.0			D49	852	150	29	43	54	81	97	99	100				1	55	43	
JUN 30	10:00	19.0			D49	859	145	37	49	72	85	98	99	100				1	50	49	
JUL 01	10:00	20.0			D49	712	149	30	45	59	85	98	99	100				1	54	45	
JUL 03	10:00	19.0			D49	785	148	35	48	71	83	97	98	99	100			2	52	48	
JUL 05	10:00	19.0			D49	132	150														
JUL 07	10:00	19.0			D49	111															
JUL 09	10:00	19.0			D49	105															
JUL 11	10:00	18.0			D49	135	143														
JUL 13	10:00	20.0			D49	103															
JUL 15	10:00	19.0			D49	104															
JUL 17	10:00	19.0			D49	53															
JUL 19	10:00	19.0			D49	49	155														
JUL 21	10:00	18.0			D49	41															
JUL 23	10:00	17.0			D49	84															
JUL 25	10:00	16.0			D49	44															
JUL 27	10:00	16.0			D49	49	155														
JUL 29	10:00	18.0			D49	39															
JUL 31	10:00	20.0			D49	47	155														
AUG 02	10:00	20.0			D49	35															
AUG 04	10:00	20.0			D49	38															
AUG 06	10:00	20.0			D49	84															
AUG 08	10:00	19.0			D49	35	159														
AUG 10	10:00	18.0			D49	33	155														
AUG 12	10:00	18.0			D49	30															
AUG 14	10:00	18.0			D49	35															
AUG 16	10:00	17.0			D49	30															
AUG 20	10:00	17.0			D49	28	150														
AUG 24	10:00	17.0			D49	31															
AUG 28	10:00	16.0			D49	31	159														
SEP 01	10:00	15.0			D49	28															
SEP 05	10:00	14.0			D49	24	175														
SEP 09	10:00	12.0			D49	19															
SEP 13	10:00	11.0			D49	40	175														
SEP 17	10:00	10.0			D49	22															
SEP 20	10:00	8.0			D49	124															
SEP 21	10:00	7.0			D49	51	170														
SEP 25	10:00	6.0			D49	51															
SEP 29	10:00	5.0			D49	121	155														
OCT 03	10:00	5.0			D49	50															
OCT 07	10:00	5.0			D49	30															
OCT 11	10:00	4.0			D49	27	151														
OCT 15	10:00	4.0			D49	57	155														
OCT 19	10:00	3.0			D49	19	155														
OCT 23	10:00	2.0			D49	22	155														
OCT 27	10:00	1.0			D49	20	157														
OCT 31	10:00	0.0			D49	28	157														

NOTE: SINGLE VERTICAL IS UNDETERMINED FOR 1985

CONCENTRATION SYMBOL(S): C - COARSE MATERIAL PRESENT

ALBERTA

 ATHABASCA RIVER AT EMBARRAS AIRPORT - STATION NO. 07DD001
 HISTORICAL SEDIMENT DATA SUMMARY

YEAR	PERIOD OF OPERATION SUMMARY	TYPE OF SAMPLING	SAMPLED CONCENTRATION		SUSPENDED SEDIMENT LOAD		SUMMARY : MAY-DEC			
			MAXIMUM	MINIMUM	MAXIMUM DAILY	TOTAL FOR PERIOD	MEAN LOAD	HISTORICAL MEAN LOAD	STANDARD ERROR OF MEAN %	
			(mg/L)	(mg/L)	(TONNES)	(TONNES)	(TONNES)	(TONNES)	(TONNES)	
(JFMAMJJASOND)			(mg/L)	(mg/L)	(TONNES)	(TONNES)	(TONNES)	(TONNES)	(TONNES)	
1971	---PPPPP--P	MANUAL	1 490 JUN 14	4 DEC 08 *	---	---	---	---	---	
1972	---PP-P----	MANUAL	355 MAY 18	13 APR 13	---	---	---	---	---	
1973	---PPP-P----	MANUAL	313 APR 28	7 JUL 05	---	---	---	---	---	
1974	---PPCC----	MANUAL	822 JUL 15	95 SEP 13	228 000 JUL 15	2 850 000	---	---	---	
1976	---CCCCC----	MANUAL	585 AUG 31	38 OCT 22	95 100 SEP 01	3 400 000	15 500	15 500	---	
1977	---CCCCC----	MANUAL	871 MAY 15	32 OCT 03	252 000 JUN 05	5 540 000	30 200	24 400	24.0	
1978	---CCCCC----	MANUAL	882 JUN 23	27 NOV 04	120 000 JUN 23	4 430 000	23 800	24 200	14.0	
1979	---PCCCCC----	MANUAL	842 JUN 21	10 NOV 03	172 000 JUN 20	4 460 000	---	---	---	
1980	---PCCCCC----	MANUAL	2 250 JUN 10	15 NOV 02	739 000 JUN 10 *	7 050 000 *	35 100	27 700	15.3	
1981	---CCCCC----	MANUAL	234 MAY 05	41 SEP 21	30 700 JUN 10	1 130 000	---	---	---	
1982	---CCCCC----	MANUAL	2 770 JUL 09 *	21 OCT 20	805 000 JUL 10	5 950 000	37 500	28 700	13.0	
1983	---CCCCC----	MANUAL	822 JUL 01	7 NOV 02	55 300 JUL 01	2 150 000	11 700	25 700	15.3	
1984	---PPCCCC----	MANUAL	1 800 JUN 05	27 APR 28	253 000 JUN 05	4 590 000	---	---	---	
1985	---PPPPPP----	MANUAL	1 410 MAY 05	15 SEP 05	---	---	---	---	---	
MANUAL - MANUAL SAMPLING										
P - PARTIAL MONTH										
* - EXTREME FOR PERIOD OF RECORD										
C - COMPLETE MONTH										

 ATHABASCA RIVER AT MCMURRAY - STATION NO. 07CC002
 INSTANTANEOUS SUSPENDED SEDIMENT FOR 1985

										PERCENT FINER THAN INDICATED SIZE, IN MILLIMETRES										PERCENT SAND SILT CLAY		
DATE	TIME	WATER TEMP.	INSTANT. DISCHARGE	SINGLE VERTICAL SAMPLING	TYPE OF SAMPLER	INSTANT. CONCENT.	DISSOLVED SOLIDS											2	73	25		
								.002	.004	.008	.015	.031	.062	.125	.250	.500	1.00				2.00	
		[C]	[m³/s]	[m]		[mg/L]	[mg/L]															
								20	25	40	55	62	85	100								
MAY 11	18:30	11.0	1190	MID	D49	388	111															
MAY 13	12:00E	12.0	1050	MID	D49	527 A	115															
MAY 15	12:00E	13.0	884	MID	D49	252	105															
MAY 15	12:00E	14.0	881	MID	D49	45 A	137															
JUN 15	12:01E	15.0	881	MID	D49	140	133															
JUN 15	12:01E	15.0	881	MID	D49	124	140															
JUN 15	12:02E	15.0	881	MID	D49	84 A	142															
JUN 25	12:00E	15.0	887	MID	D49	181	142															
JUN 25	12:01E	15.0	887	MID	D49	193	144															
JUN 27	12:00E	15.0	811	MID	D49	75 A	145															
JUN 27	12:01E	15.0	811	MID	D49	520	151															
JUL 03	12:00E	15.0	1180	MID	D49	845 A	159															
JUL 03	12:01E	15.0	1180	MID	D49	827 A	180															
JUL 05	12:00E	20.0	879	MID	D49	187 C	131															
JUL 10	12:00E	20.0	897	MID	D49																	

NOTE : SINGLE VERTICAL LOCATED AT MID (MID STREAM) FOR 1985

 TIME SYMBOL: E - ESTIMATED
 CONCENTRATION SYMBOL(S): A - CLASSIFIED AS AN ANOMALY C - COARSE MATERIAL PRESENT

 ATHABASCA RIVER AT MCMURRAY - STATION NO. 07CC002
 HISTORICAL SEDIMENT DATA SUMMARY

YEAR	PERIOD OF OPERATION SUMMARY	TYPE OF SAMPLING	SAMPLED CONCENTRATION		SUSPENDED SEDIMENT LOAD		SUMMARY			
			MAXIMUM	MINIMUM	MAXIMUM DAILY	TOTAL FOR PERIOD (TONNES)	MEAN LOAD (TONNES)	HISTORICAL MEAN LOAD (TONNES)	STANDARD ERROR OF MEAN %	
			(mg/L)	(mg/L)	(TONNES)					
(JFMAMJJASOND)										
1973	PP-PPCCCCC--	MANUAL	4 040 JUN 17 *	14 FEB 28	---	---	---	---	---	---
1974	CCCCCCCCC--	MANUAL	1 330 JUL 17	18 OCT 11	---	---	---	---	---	---
1975	P-PPCCCCC--	MANUAL	1 800 JUL 02	7 MAR 15	---	---	---	---	---	---
1976	CCCCCCCCC--	MANUAL	1 210 AUG 23	8 JAN 18	---	---	---	---	---	---
1977	---CCCCC---	MANUAL	1 930 JUN 03	20 OCT 24	---	---	---	---	---	---
1978	CCCCCCCCC--	MANUAL	1 800 JUN 20	5 FEB 03 *	---	---	---	---	---	---
1979	---CCCCC---	MANUAL	1 800 JUN 18	5 MAR 15	---	---	---	---	---	---
1980	---PCCCC---	MANUAL	820 AUG 07	32 OCT 10	---	---	---	---	---	---
1981	---PCCCC---	MANUAL	599 JUN 07	15 SEP 18	---	---	---	---	---	---
1982	---PCCCC---	MANUAL	2 980 JUL 08	52 SEP 01	---	---	---	---	---	---
1983	---PCCCC---	MANUAL	45 JUN 07	6 SEP 05	---	---	---	---	---	---
1984	---PCCCC---	MANUAL	645 MAY 24	20 AUG 31	---	---	---	---	---	---
1985	---CCCC---	MANUAL	827 JUL 08	45 JUN 15	---	---	---	---	---	---
MANUAL - MANUAL SAMPLING										
P - PARTIAL MONTH										
* - EXTREME FOR PERIOD OF RECORD										
C - COMPLETE MONTH										

ATHABASCA RIVER NEAR WINDFALL - STATION NO. 07AE001

INSTANTANEOUS SUSPENDED SEDIMENT FOR 1985

DATE	TIME	WATER TEMP. (C)	INSTANT. DISCHARGE (m ³ /s)	SINGLE SAMPLING VERTICAL SAMPLER (m)	TYPE OF SAMPLER	INSTANT. CONCENT. (mg/L)	DISSOLVED SOLIDS (mg/L)	PERCENT FINER THAN INDICATED SIZE, IN MILLIMETRES										PERCENT SAND SILT CLAY				
								.002	.004	.008	.018	.031	.062	.125	.250	.500	1.00	2.00				
MAY 28	11:15	8.0	488		WERS	DIP	80															
JUN 18	10:10	18.0	321		10RS	DHS9	23															
JUL 17	10:30	18.0	400		10RS	DHS9	88															
SEP 11	10:30	8.0	204		WERS	DIP	8															
OCT 09	17:30		174	H	WERS	DIP	4															

NOTE: SINGLE VERTICAL IS UNDETERMINED FOR 1985

DISCHARGE SYMBOL(S): H - DAILY MEAN

ATHABASCA RIVER NEAR WINDFALL - STATION NO. 07AE001

HISTORICAL SEDIMENT DATA SUMMARY

YEAR	PERIOD OF OPERATION SUMMARY	TYPE OF SAMPLING	SAMPLED CONCENTRATION		SUSPENDED SEDIMENT LOAD		SUMMARY:		
			MAXIMUM (mg/L)	MINIMUM (mg/L)	MAXIMUM DAILY (TONNES)	TOTAL FOR PERIOD (TONNES)	MEAN LOAD (TONNES)	HISTORICAL MEAN LOAD (TONNES)	STANDARD ERROR OF MEAN %
1974	-----PP----	MANUAL	31 AUG 28	8 SEP 28	---	---	---	---	---
1975	----PP--P----	MANUAL	89 JUN 17	8 SEP 28	---	---	---	---	---
1976	----PP--P----	MANUAL	238 JUN 22	10 SEP 22	---	---	---	---	---
1977	----PP--P----	MANUAL	195 JUN 22	20 SEP 28	---	---	---	---	---
1978	-----PPPPPP--	MANUAL	813 JUN 08	8 OCT 31	---	---	---	---	---
1979	-----PPPPPP--	MANUAL	832 MAY 29	7 OCT 30	---	---	---	---	---
1980	-----PPPPPP--	MANUAL	1 810 JUN 08 *	11 OCT 18	---	---	---	---	---
1981	-----PPPPPP--	MANUAL	80 MAY 19	8 OCT 07	---	---	---	---	---
1982	----PP--P----	MANUAL	894 JUL 07	38 SEP 28	---	---	---	---	---
1983	----PPPP--	MANUAL	87 JUN 08	8 SEP 27	---	---	---	---	---
1984	----P-P----	MANUAL	201 JUL 03	9 MAY 02	---	---	---	---	---
1985	----PP--P----	MANUAL	80 MAY 29	4 OCT 09 *	---	---	---	---	---

MANUAL - MANUAL SAMPLING

P - PARTIAL MONTH

* - EXTREME FOR PERIOD OF RECORD

BATTLE RIVER NEAR THE SASKATCHEWAN BOUNDARY - STATION NO. 05BF004

INSTANTANEOUS SUSPENDED SEDIMENT FOR 1985

DATE	TIME	WATER TEMP. (C)	INSTANT. DISCHARGE (m ³ /s)	SINGLE SAMPLING VERTICAL SAMPLER (m)	TYPE OF SAMPLER	INSTANT. CONCENT. (mg/L)	DISSOLVED SOLIDS (mg/L)	PERCENT FINER THAN INDICATED SIZE, IN MILLIMETRES										PERCENT SAND SILT CLAY			
								.002	.004	.008	.018	.031	.062	.125	.250	.500	1.00	2.00			
APR 10	10:30	8.5	88.7		40.0	DHS9	1180	290	21	28	35	43	55	88	88	88	100		32	40	28
APR 11	18:40	8.5	88.0	H	40.0	DHS9	1170	298	23	28	37	41	53	84	80	87	100		38	38	28
APR 17	09:50	7.0	82.8		40.0	DHS9	803	307	20	31	39	48	80	71	87	98	100		28	40	31
APR 23	12:50	8.0	88.8	H	40.0	DHS9	730	289	21	27	38	48	88	87	88	99	100		33	40	27
MAY 8	18:10	14.0	40.0		40.0	DHS9	403	322	18	23	38	48	82	72	88	98	100		28	49	23
JUN 4	12:40	13.0	11.8	H	40.0	DHS9	78	478													
JUL 10	12:50	22.5	2.48		40.0	DHS9	43	582													
AUG 21	14:00	18.5	1.04	H	MID	X	DH48	8													
OCT 31	14:00	1.0	1.85		MID	X	DH48	18													

NOTE: SINGLE VERTICAL LOCATED AT 40.0 METRES FOR 1985

DISCHARGE SYMBOL(S):

H - DAILY MEAN

VERTICAL SYMBOL(S):

X - NOT AT REGULAR SINGLE SAMPLE VERTICAL

BATTLE RIVER NEAR THE SASKATCHEWAN BOUNDARY - STATION NO. 05F004

HISTORICAL SEDIMENT DATA SUMMARY

YEAR	PERIOD OF OPERATION SUMMARY	TYPE OF SAMPLING	SAMPLED CONCENTRATION		SUSPENDED SEDIMENT LOAD		SUMMARY :		
			MAXIMUM	MINIMUM	MAXIMUM DAILY	TOTAL FOR PERIOD	MEAN LOAD	HISTORICAL MEAN LOAD	STANDARD ERROR OF MEAN %
(JFMAMJJASOND)			(mg/L)	(mg/L)	(TONNES)	(TONNES)	(TONNES)	(TONNES)	
1980	---PPPPPP-P-	MANUAL	714 APR 18	17 JUN 25	---	---	---	---	---
1981	---CCPPPP-P-	MANUAL	292 APR 08	7 JUL 29	867 APR 05 *	13 400 *	---	---	---
1982	---PPPPPP-P-	MANUAL	1 280 MAY 10 *	38 JUL 07	---	---	---	---	---
1983	---PPPPPP-P-	MANUAL	480 APR 13	7 NOV 01	---	---	---	---	---
1984	---PP-P-PP--	MANUAL	132 OCT 03	18 JUL 31	---	---	---	---	---
1985	---PPPP-P--	MANUAL	1 180 APR 10	8 AUG 21 *	---	---	---	---	---
MANUAL - MANUAL SAMPLING									
C - COMPLETE MONTH P - PARTIAL MONTH * - EXTREME FOR PERIOD OF RECORD									

BEAVER RIVER AT COLD LAKE RESERVE - STATION NO. 06A006

INSTANTANEOUS SUSPENDED SEDIMENT FOR 1985

DATE	TIME	WATER	INSTANT.	SINGLE	TYPE	INSTANT.	DISSOLVED	PERCENT FINER THAN INDICATED SIZE, IN MILLIMETRES										PERCENT		
		TEMP.	DISCHARGE	SAMPLING	OF	CONCENT.	SOLIDS	.002	.004	.008	.016	.031	.062	.125	.250	.500	1.00	2.00	SAND	SILT
		(C)	(m ³ /s)	(m)		(mg/L)	(mg/L)													
APR 24	13:30	8.0	39.8	---	DIP	82	184													
JUL 30	12:20	21.0	8.12	7.0 X	DH48	4	205													
OCT 01	10:00	8.0	11.2	5.0 X	DH48	4	270													

NOTE : SINGLE VERTICAL LOCATED AT MID (MID STREAM) FOR 1985

VERTICAL SYMBOL(S): X - NOT AT REGULAR SINGLE SAMPLE VERTICAL

BEAVER RIVER AT COLD LAKE RESERVE - STATION NO. 06A006

HISTORICAL SEDIMENT DATA SUMMARY

YEAR	PERIOD OF OPERATION SUMMARY	TYPE OF SAMPLING	SAMPLED CONCENTRATION		SUSPENDED SEDIMENT LOAD		SUMMARY :		
			MAXIMUM	MINIMUM	MAXIMUM DAILY	TOTAL FOR PERIOD (TONNES)	MEAN LOAD (TONNES)	HISTORICAL MEAN LOAD (TONNES)	STANDARD ERROR OF MEAN %
(JFMAMJJASOND)			(mg/L)	(mg/L)	(TONNES)				
1974	-----PP---	MANUAL	18 SEP 24	17 AUG 14	---	---	---	---	---
1975	---P---PPP---	MANUAL	399 APR 26 *	22 SEP 30	---	---	---	---	---
1976	---PPPPPP---	MANUAL	152 APR 13	10 MAY 19	---	---	---	---	---
1977	---PPPPPPPP---	MANUAL	109 APR 18	11 SEP 08	---	---	---	---	---
1978	---P-PPPPPP---	MANUAL	295 JUN 03	5 AUG 21	---	---	---	---	---
1979	---PPPPPPPP---	MANUAL	278 MAY 01	7 OCT 30	---	---	---	---	---
1980	---P-PPPP---	MANUAL	102 APR 22	11 JUL 16	---	---	---	---	---
1981	---PPPP-P---	MANUAL	43 APR 23	3 SEP 10 *	---	---	---	---	---
1982	---P---PP---	MANUAL	41 MAY 11	8 SEP 22	---	---	---	---	---
1983	---P---P-P-	MANUAL	42 APR 18	8 OCT 26	---	---	---	---	---
1984	---PP---P-P-	MANUAL	83 APR 07	5 OCT 02	---	---	---	---	---
1985	---P---P-P-	MANUAL	82 APR 24	4 JUL 30	---	---	---	---	---
MANUAL - MANUAL SAMPLING									
P - PARTIAL MONTH									

ALBERTA

BIRCH RIVER BELOW ALICE CREEK - STATION NO. 07K001

HISTORICAL SEDIMENT DATA SUMMARY

YEAR	PERIOD OF OPERATION SUMMARY	TYPE OF SAMPLING	SAMPLED CONCENTRATION		SUSPENDED SEDIMENT LOAD		SUMMARY		
			MAXIMUM	MINIMUM	MAXIMUM DAILY	TOTAL FOR PERIOD	MEAN LOAD	HISTORICAL MEAN LOAD	STANDARD ERROR OF MEAN %
	(JFMAMJJASOND)		(mg/L)	(mg/L)	(TONNES)	(TONNES)	(TONNES)	(TONNES)	
1970	---PP-----	MANUAL	136 MAY 14	26 JUN 22	---	---	---	---	---
1971	---P-PPP----	MANUAL	48 SEP 14	22 AUG 02	---	---	---	---	---
1972	---PPPP-----	MANUAL	131 MAY 26	8 AUG 28	---	---	---	---	---
1973	---P-P-P-P----	MANUAL	1 430 JUL 12	37 OCT 16	---	---	---	---	---
1974	---PPP-P----	MANUAL	244 AUG 20	46 OCT 04	---	---	---	---	---
1975	---PPPP-----	MANUAL	8 320 AUG 26 *	88 JUL 21	---	---	---	---	---
1976	---PP-PPP-P-	MANUAL	637 APR 19	14 NOV 03	---	---	---	---	---
1977	---PPPPPP-----	MANUAL	385 APR 17	14 SEP 20	---	---	---	---	---
1978	---PPPPPP-----	MANUAL	1 300 APR 28	20 JUL 18	---	---	---	---	---
1979	---PPPPPP-----	MANUAL	835 MAY 18	20 JUL 27	---	---	---	---	---
1980	---PPPPPP-----	MANUAL	255 APR 23	12 MAY 23	---	---	---	---	---
1981	---P-PP-----	MANUAL	81 MAY 26	5 AUG 27 *	---	---	---	---	---
1982	---PP-PP-----	MANUAL	423 MAY 24	16 JUN 24	---	---	---	---	---
1983	---P-P-PP-----	MANUAL	486 APR 30	31 SEP 15	---	---	---	---	---
1984	---P-PP-----	MANUAL	180 MAY 25	57 OCT 03	---	---	---	---	---
1985	---P-P-P-----	MANUAL	1 270 APR 28	8 AUG 21	---	---	---	---	---

MANUAL - MANUAL SAMPLING

P - PARTIAL MONTH

* - EXTREME FOR PERIOD OF RECORD

BOW RIVER AT CALGARY - STATION NO. 058H004

INSTANTANEOUS SUSPENDED SEDIMENT FOR 1985

DATE	TIME	WATER TEMP.	INSTANT. DISCHARGE	SINGLE VERTICAL SAMPLING	TYPE OF SAMPLER	INSTANT. CONCENT.	DISSOLVED SOLIDS	PERCENT FINER THAN INDICATED SIZE, IN MILLIMETRES										PERCENT SAND SILT CLAY		
								.002	.004	.008	.016	.031	.062	.125	.250	.500	1.00	2.00		
		(C)	(m³/s)	(m)		(mg/L)	(mg/L)													
APR 12	09:00	3.0	52.8	32.0	DH59	4	188													
MAY 01	10:30	8.0	55.7	32.0	DH59	5	187													
MAY 24	11:40	13.0	119	32.0	DH59	13	183													
JUN 20	11:40	15.0	105	32.0	DH59	8	149													
JUL 18	11:35	14.0	129	32.0	DH59	4	154													
AUG 27	10:40	10.0	55.7	32.0	DH59	8	159													
SEP 17	10:20	8.0	130	32.0	DH59	10	175													
OCT 09	12:10	3.0	48.8	32.0	DH59	6	189													

NOTE: SINGLE VERTICAL IS UNDETERMINED FOR 1985

BOW RIVER AT CALGARY - STATION NO. 058H004

HISTORICAL SEDIMENT DATA SUMMARY

YEAR	PERIOD OF OPERATION SUMMARY	TYPE OF SAMPLING	SAMPLED CONCENTRATION		SUSPENDED SEDIMENT LOAD		SUMMARY : JAN-DEC		
			MAXIMUM	MINIMUM	MAXIMUM DAILY	TOTAL FOR PERIOD	MEAN LOAD	HISTORICAL MEAN LOAD	STANDARD ERROR OF MEAN %
	(JFMAMJJASOND)		(mg/L)	(mg/L)	(TONNES)	(TONNES)	(TONNES)	(TONNES)	
1972	---CCCCCCCC	MANUAL	101 JUN 02	1 NOV 24	3 470 JUN 03	57 200	---	---	---
1973	CCCCCCCCCCCC	MANUAL	82 MAY 28	1 AUG 01	1 470 MAY 27	30 800	84.4	84.4	---
1974	CCCCCCCCCCCC	MANUAL	105 JUN 28 *	0 FEB 04 *	4 320 JUN 28 *	83 300 *	174	129	34.7
1975	CCCCCCCCCCCC	MANUAL	29 JUN 08	1 JAN 03	331 JUN 08	11 300	31.0	98.5	42.2
1976	CCCCCCCCCCCC	MANUAL	38 OCT 15	0 SEP 03	584 AUG 07	21 400	55.3	88.9	35.7
1977	CCCCCCCCCCCC	MANUAL	19 JUN 10	2 MAR 14	341 JUN 10	12 600	34.5	76.4	34.3
1978	CCCCCCCCCCCC	MANUAL	57 JUN 07	2 AUG 08	1 090 JUN 10	30 200	82.7	77.5	27.6
1979	P-PPP-----	MANUAL	20 APR 11	2 JAN 28	---	---	---	---	---
1981	---PP-P-P-P-	MANUAL	82 MAY 26	2 OCT 21	3 240 MAY 26	5 920	---	---	---
1982	---P-P-PP-P-	MANUAL	17 APR 28	1 SEP 02	---	---	---	---	---
1983	---PPPP-----	MANUAL	11 JUN 01	2 JUL 22	---	---	---	---	---
1984	---P-P-P----	MANUAL	11 JUL 03	3 MAY 01	---	---	---	---	---
1985	---PPPPPP-----	MANUAL	13 MAY 24	4 APR 12	---	---	---	---	---

MANUAL - MANUAL SAMPLING

C - COMPLETE MONTH

P - PARTIAL MONTH

* - EXTREME FOR PERIOD OF RECORD

BOYER RIVER NEAR FORT VERMILION - STATION NO. 07JF002

INSTANTANEOUS SUSPENDED SEDIMENT FOR 1985

DATE	TIME	WATER	INSTANT	SINGLE	TYPE	INSTANT	DISSOLVED	PERCENT FINER THAN INDICATED SIZE, IN MILLIMETRES										PERCENT		
		DISCHARGE	SAMPLING	CONCENT.		SOLIDS	.002	.004	.008	.018	.031	.062	.125	.250	.500	1.00	2.00	SAND	SILT	CLAY
		(C)	(m ³ /s)	VERTICAL		(m)	(mg/L)	(mg/L)												
MAY 31	11:20	14.0	4.85	MID	X DH48	19	483													
JUN 20	08:40	19.0	0.311	MID	X DH48	7	559													
JUL 23	14:10	20.0	0.008	MID	X DIP	5	579													
AUG 20	14:30	18.0	0.008	MID	X DIP	7	579													
SEP 25	14:45	8.0	0.010	MID	X DIP	9	548													
OCT 30	18:10	0.5	1.55	B MID	X DIP	20	562													

NOTE: SINGLE VERTICAL LOCATED AT MID (MID STREAM) FOR 1985

DISCHARGE SYMBOL(S): B - ICE CONDITIONS
 VERTICAL SYMBOL(S): X - NOT AT REGULAR SINGLE SAMPLE VERTICAL

BOYER RIVER NEAR FORT VERMILION - STATION NO. 07JF002

HISTORICAL SEDIMENT DATA SUMMARY

YEAR	PERIOD OF OPERATION	TYPE OF SAMPLING	SAMPLED CONCENTRATION		SUSPENDED SEDIMENT LOAD		SUMMARY		
	SUMMARY		MAXIMUM	MINIMUM	MAXIMUM DAILY	TOTAL FOR PERIOD	MEAN LOAD	HISTORICAL MEAN LOAD	STANDARD ERROR OF MEAN %
	(JFMAMJJASOND)		(mg/L)	(mg/L)	(TONNES)	(TONNES)			
1974	-----PP--	MANUAL	10 OCT 31	9 SEP 17	---	---	---	---	---
1975	---PPP-PPP--	MANUAL	152 MAY 01 *	8 AUG 07	---	---	---	---	---
1976	---PPPPPP--	MANUAL	138 APR 21	9 JUN 23	---	---	---	---	---
1977	---P-PP-PP--	MANUAL	49 APR 28	4 SEP 08 *	---	---	---	---	---
1978	---PPP-P--	MANUAL	45 MAY 09	18 OCT 04	---	---	---	---	---
1979	-----PPP-P-	MANUAL	31 JUL 28	4 AUG 16	---	---	---	---	---
1980	-----P-----	MANUAL	18 JUN 05	15 JUN 05	---	---	---	---	---
1981	---PP-----	MANUAL	13 MAY 27	12 JUN 30	---	---	---	---	---
1982	---P-----	MANUAL	85 MAY 04	23 MAY 20	---	---	---	---	---
1983	---PP-----	MANUAL	38 MAY 08	11 JUN 02	---	---	---	---	---
1984	---PPPPPP--	MANUAL	73 MAY 02	8 AUG 28	---	---	---	---	---
1985	---PPPPPP--	MANUAL	20 OCT 30	5 JUL 23	---	---	---	---	---

MANUAL - MANUAL SAMPLING

P - PARTIAL MONTH

* - EXTREME FOR PERIOD OF RECORD

CLEARWATER RIVER AT DRAPER - STATION NO. 07CD001

SUSPENDED SEDIMENT FOR 1985

LOCATION: LAT 56 41 07 N LONG 111 15 15 W
 DRAINAGE AREA: 30 800 km²
 TYPE OF FLOW: NATURAL
 TYPE OF GAUGE: RECORDING

TOTAL SUSPENDED SEDIMENT LOAD 505 000 TONNES FOR THE PERIOD MAY 01 TO SEP 30

REMARKS:

DAY	MAY			"	JUN			"	JUL			DAY
	DAILY DISCHARGE (m ³ /s)	MEAN CON-CENTRATION (mg/L)	DAILY LOAD (t)		DAILY DISCHARGE (m ³ /s)	MEAN CON-CENTRATION (mg/L)	DAILY LOAD (t)		DAILY DISCHARGE (m ³ /s)	MEAN CON-CENTRATION (mg/L)	DAILY LOAD (t)	
1	382	804	18 800	"	222	173	3 320	"	178	33	508	1
2	371	843	20 600	"	222	140	2 690	"	172	31	461	2
3	376	737	23 900	"	220	98	1 810	"	186	29 S	416	3
4	380	848	28 800	"	218	81 S	1 140	"	180	29	401	4
5	485	978	38 300	"	212	50	918	"	155	33	442	5
6	539	1 120 S	52 200	"	208	54	970	"	148	37	478	6
7	559	917 S	44 300	"	203	50	1 050	"	146	44	555	7
8	549	662	26 700	"	198	71	1 210	"	141	51 S	621	8
9	539	389	18 100	"	193	81	1 350	"	136	54	635	9
10	536	289	12 500	"	189	86	1 400	"	133	62	712	10
11	541	182	7 570	"	185	90	1 440	"	128	85	947	11
12	547	98 S	4 830	"	182	94	1 480	"	124	115	1 230	12
13	542	86	4 030	"	177	94	1 440	"	121	148	1 550	13
14	529	88 S	4 020	"	173	94	1 410	"	117	171	1 730	14
15	510	88	3 880	"	168	94	1 360	"	116	181 S	1 810	15
16	487	89	3 740	"	165	95	1 350	"	113	183	1 890	16
17	464	88	3 530	"	162	97	1 380	"	110	135	1 280	17
18	434	89	3 340	"	158	98	1 350	"	107	105	971	18
19	403	88	3 080	"	155	122	1 640	"	105	80	728	19
20	377	87	2 830	"	155	182	2 440	"	102	61	538	20
21	384	85	2 800	"	155	205 S	2 780	"	101	48	418	21
22	322	81	2 330	"	155	177	2 370	"	101	40	348	22
23	313	76	2 060	"	153	107 S	1 410	"	98.8	33	262	23
24	285	72	1 840	"	152	53	896	"	97.6	29	245	24
25	280	82 S	1 980	"	150	38 S	525	"	97.6	30 S	253	25
26	285	104 S	2 380	"	175	45	880	"	98.0	38	305	26
27	253	126	2 730	"	185	57	911	"	99.3	40	343	27
28	140	140	2 820	"	189	57	931	"	99.4	41	352	28
29	230	155	3 080	"	188	44 S	715	"	101	47	410	29
30	223	169	3 260	"	184	37 S	588	"	101	51	445	30
31	220	181 S	3 440	"	"	"	"	"	100	51 S	441	31
TOTAL	12 528		354 350	"	5 480		42 712	"	3 774.7		21 443	TOTAL

DAY	AUG			"	SEP			"				DAY
	DAILY DISCHARGE (m ³ /s)	MEAN CON-CENTRATION (mg/L)	DAILY LOAD (t)		DAILY DISCHARGE (m ³ /s)	MEAN CON-CENTRATION (mg/L)	DAILY LOAD (t)		DAILY DISCHARGE (m ³ /s)	MEAN CON-CENTRATION (mg/L)	DAILY LOAD (t)	
1	98.6	50	426	"	78.6	284	1 820	"				1
2	95.6	49	409	"	77.8	292 S	1 860	"				2
3	94.0	49	398	"	75.5	290	1 890	"				3
4	92.9	49	393	"	74.2	285	1 880	"				4
5	90.6	49	384	"	77.0	280	1 880	"				5
6	89.3	49	378	"	75.6	275	1 800	"				6
7	88.4	49	374	"	75.7	270	1 770	"				7
8	86.2	49	365	"	75.0	263	1 730	"				8
9	85.7	50	370	"	75.8	265	1 870	"				9
10	84.3	50	384	"	75.1	248	1 810	"				10
11	84.3	50	384	"	74.9	240	1 550	"				11
12	82.5	49	348	"	74.7	233	1 500	"				12
13	81.1	49	343	"	74.4	228	1 450	"				13
14	80.8	52	363	"	74.4	218	1 400	"				14
15	80.8	103	719	"	73.4	210	1 330	"				15
16	80.3	214	1 480	"	73.6	203	1 290	"				16
17	80.0	461	3 190	"	74.7	186	1 280	"				17
18	79.6	897	4 790	"	73.9	189	1 210	"				18
19	78.0	723 S	4 870	"	73.2	181	1 180	"				19
20	74.8	515	3 870	"	75.5	174	1 150	"				20
21	73.2	548	3 470	"	77.3	187	1 120	"				21
22	72.3	507 S	3 170	"	77.0	189	1 080	"				22
23	72.7	428	2 680	"	78.3	152	1 030	"				23
24	73.2	322	2 040	"	78.0	144	970	"				24
25	73.7	274	1 740	"	78.3	137	927	"				25
26	74.4	251	1 610	"	78.5	130	883	"				26
27	74.0	234	1 500	"	78.2	122	835	"				27
28	75.1	225 S	1 460	"	78.4	116	788	"				28
29	76.4	224	1 480	"	78.9	107	729	"				29
30	76.7	229	1 520	"	78.7	100	880	"				30
31	78.1	243	1 840	"	"	"	"	"				31
TOTAL	2 528.6		48 808	"	2 284.0		40 333	"				TOTAL

S - SAMPLE(S) COLLECTED THIS DAY

ALBERTA

CLEARWATER RIVER AT DRAPER - STATION NO. 07C0001

INSTANTANEOUS SUSPENDED SEDIMENT FOR 1985

DATE	TIME	WATER INSTANT. DISCHARGE		SINGLE SAMPLING OF VERTICAL	TYPE OF SAMPLER	INSTANT. CONCENT.	DISSOLVED SOLIDS	PERCENT FINER THAN INDICATED SIZE, IN MILLIMETRES										PERCENT SAND SILT CLAY			
		(C)	(m ³ /s)					(m)	(mg/L)	(mg/L)	.002	.004	.008	.016	.031	.062	.125	.250	.500	1.00	2.00
MAY 05	21:04	7.0	848	MID	D49	1180	135	15	18	31	39	55	75	88	95	100			25	57	18
MAY 07	18:30	8.0	880	MID	D49	753	133	21	27	43	55	75	93	97	100			7	55	27	
MAY 12	12:00E	8.0	848	MID	D49	834 A	134														
MAY 12	12:01E	8.0	848	MID	D49	92	125														
MAY 14	12:00E	9.0	831	MID	D49	885 A	144														
MAY 14	12:01E	9.0	831	MID	D49	89	133														
MAY 25	12:00E	14.9	280	MID	D49	81	128														
MAY 26	12:00E	15.5	285	MID	D49	103	120														
MAY 28	12:01E	15.5	285	MID	D49	405 A	119														
MAY 31	12:00E	15.5	218	MID	D49	184	129														
MAY 31	12:01E	15.5	218	MID	D49	441 A	112														
JUN 04	12:00E	17.7	218	MID	D49	77	139														
JUN 04	12:01E	17.7	218	MID	D49	38	135														
JUN 21	12:00E	15.0	155	MID	D49	209	141														
JUN 21	12:01E	15.0	155	MID	D49	825 A	144														
JUN 23	12:00E	18.0	153	MID	D49	357 A	142														
JUN 23	12:01E	18.0	153	MID	D49	168	132														
JUN 25	12:00E	18.0	159	MID	D49	427 A	138														
JUN 25	12:01E	18.0	159	MID	D49	37	128														
JUN 29	12:00E	19.0	158	MID	D49	43	130														
JUN 30	12:00E	19.0	184	MID	D49	38															
JUL 03	12:00E	19.0	168	MID	D49	29															
JUL 08	12:00E	21.0	141	MID	D49	51															
JUL 15	12:00E	23.0	115	MID	D49	185 C	156														
JUL 25	12:00E	19.0	97.8	MID	D49	30															
JUL 31	12:00E	21.0	100	MID	D49	51															
AUG 19	12:00E	22.0	75.0	MID	D49	733 C	173														
AUG 22	12:00E	23.0	72.1	MID	D49	507 C															
AUG 28	12:00E	22.0	74.9	MID	D49	224															
SEP 02	12:00E	21.0	78.0	MID	D49	285	152														

NOTE : SINGLE VERTICAL IS UNDETERMINED FOR 1985

TIME SYMBOL: E - ESTIMATED

CONCENTRATION SYMBOL(S): A - CLASSIFIED AS AN ANOMALY C - COARSE MATERIAL PRESENT

CLEARWATER RIVER AT DRAPER - STATION NO. 07C0001

HISTORICAL SEDIMENT DATA SUMMARY

YEAR	PERIOD OF OPERATION SUMMARY	TYPE OF SAMPLING	SAMPLED CONCENTRATION		SUSPENDED SEDIMENT LOAD		SUMMARY : MAR-OCT		
			MAXIMUM	MINIMUM	MAXIMUM DAILY	TOTAL FOR PERIOD	MEAN LOAD	HISTORICAL MEAN LOAD	STANDARD ERROR OF MEAN %
	(JPNMJJASOND)		(mg/L)	(mg/L)	(TONNES)	(TONNES)	(TONNES)	(TONNES)	
1967	---PP-PPP-P	MANUAL	330 MAY 12	6 DEC 12	---	---	---	---	---
1968	PPPPPPPPPP-P	MANUAL	389 JUL 04	3 MAR 21 *	---	---	---	---	---
1969	CCCCCCCCCCCC	MANUAL	2 030 APR 21	3 AUG 28	79 500 APR 21	810 000	2 470	2 470	---
1970	CCCCCCCCCCCC	MANUAL	2 380 JUL 02 *	5 JAN 28	137 000 JUL 02 *	1 530 000 *	5 560	4 530	45.4
1971	CCCCCCCCCCCC	MANUAL	1 550 APR 24	5 JAN 29	55 000 APR 24	587 000	2 780	3 540	33.5
1972	CCCCCCCCCCCC	MANUAL	841 MAY 04	5 AUG 21	47 200 MAY 04	485 000	1 560	3 450	30.7
1973	CCCCCCCCC--	MANUAL	1 710 AUG 07	5 FEB 28	80 400 AUG 07	990 000	---	---	---
1974	---CCCCC---	MANUAL	755 MAY 11	50 SEP 11	75 500 MAY 01	1 240 000	---	---	---
1975	P-P-PPCCCC--	MANUAL	1 020 JUL 17	7 MAR 15	35 500 JUL 18	1 020 000	---	---	---
1976	PPCCCCCCCC--	MANUAL	1 250 AUG 28	10 MAR 03	35 200 AUG 28	717 000	2 320	3 340	24.7
1977	---CCCCC---	MANUAL	852 MAY 20	15 OCT 25	17 500 MAY 31	455 000	---	---	---
1978	CCCCCCCCCCCC	MANUAL	854 APR 30	5 DEC 04	17 700 APR 30	527 000	2 120	3 140	22.4
1979	CCCCCCCC---	MANUAL	1 000 MAY 17	7 JAN 08	48 500 MAY 17	573 000	3 550	3 200	18.7
1980	---CCCCC---	MANUAL	1 050 AUG 05	11 JUL 29	35 300 AUG 18	553 000	---	---	---
1981	---PPCCCC---	MANUAL	118 AUG 08	7 SEP 01	1 320 JUL 17	34 500	---	---	---
1982	---CCCC---	MANUAL	47 AUG 15	5 JUL 20	711 JUN 01	30 500	---	---	---
1983	---PPCCCP---	MANUAL	123 APR 28	18 JUN 22	2 010 APR 28	52 500	---	---	---
1985	---CCCC---	MANUAL	1 150 MAY 05	29 JUL 03	52 200 MAY 05	505 000	---	---	---

MANUAL - MANUAL SAMPLING

C - COMPLETE MONTH

P - PARTIAL MONTH

* - EXTREME FOR PERIOD OF RECORD

CROWSNEST RIVER AT FRANK - STATION NO. 05A0005

INSTANTANEOUS SUSPENDED SEDIMENT FOR 1985

DATE	TIME	WATER TEMP.		INSTANT. DISCHARGE	SINGLE SAMPLING OF VERTICAL SAMPLER	TYPE OF SAMPLER	INSTANT. CONCENT.	DISSOLVED SOLIDS	PERCENT FINER THAN INDICATED SIZE, IN MILLIMETRES										PERCENT SAND	PERCENT SILT	PERCENT CLAY
		[C]	[m ³ /s]				[mg/L]	[mg/L]	.003	.004	.005	.015	.031	.063	.125	.250	.500	1.00	2.00		
APR 10	14:00	8.0	1.54	MID	X	DN48	12	259													
APR 29	14:55	7.0	4.48	MID	X	DN48	24	208													
MAY 29	11:05	8.0	10.2	MID	X	DN48	17	204													
JUN 28	18:40	10.0	5.74	MID	X	DN48	8	212													
JUN 28	18:41	18.0	5.74	MID	X	DN48	5	248													
JUL 31	14:00	18.0	2.33	MID	X	DN48	7	218													
AUG 28	14:40	13.0	2.48	MID	X	DIP	3	238													
SEP 25	09:45	8.0	3.94	MID	X	DN48	8	223													
OCT 29	10:28	2.0	5.33	MID	X	DN48	7	204													

NOTE : SINGLE VERTICAL LOCATED AT MID (MID STREAM) FOR 1985

VERTICAL SYMBOL(S) : X - NOT AT REGULAR SINGLE SAMPLE VERTICAL

CROWSNEST RIVER AT FRANK - STATION NO. 05A0005

HISTORICAL SEDIMENT DATA SUMMARY

YEAR	PERIOD OF OPERATION SUMMARY	TYPE OF SAMPLING	SAMPLED CONCENTRATION		SUSPENDED SEDIMENT LOAD		SUMMARY : MAR-OCT		
			MAXIMUM	MINIMUM	MAXIMUM DAILY	TOTAL FOR PERIOD	MEAN LOAD	HISTORICAL MEAN LOAD	STANDARD ERROR OF MEAN %
			(mg/L)	(mg/L)	(TONNES)	(TONNES)	(TONNES)	(TONNES)	
1972	---PP-----	MANUAL	602 MAY 21 *	42 JUN 05	---	---	---	---	---
1974	-----P-PP--	MANUAL	8 JUL 23	3 OCT 02	---	---	---	---	---
1975	---PPPPPPPP--	MANUAL	584 JUN 20	2 SEP 02	---	---	---	---	---
1976	---CCCCCCCC--	MANUAL	107 AUG 09	2 OCT 05	271 AUG 05	3 780	---	---	---
1977	---CCCCCCCC--	MANUAL	24 JUN 09	4 APR 13	13.7 JUN 05	714	2.75	2.75	---
1978	CCCCCCCCCCCC	MANUAL	74 JUN 05	2 OCT 31	187 JUN 05	2 610	10.4	8.55	58.1
1979	CCCCCCCCCCCC	MANUAL	153 MAY 25	0 FEB 13 *	525 MAY 27 *	2 820 *	15.5	9.55	38.8
1980	---CCCCCCCC--	MANUAL	55 APR 30	4 AUG 17	151 APR 30	2 080	8.50	9.29	28.3
1981	---PP-PPP--	MANUAL	51 MAY 01	5 SEP 03	---	---	---	---	---
1982	---PPPP-P--	MANUAL	28 APR 15	2 SEP 18	---	---	---	---	---
1983	---PPPPP-P-P-	MANUAL	98 MAR 30	3 SEP 01	---	---	---	---	---
1984	---PPPPPP--	MANUAL	35 APR 04	4 AUG 21	---	---	---	---	---
1985	---PPPPPPPP--	MANUAL	24 APR 28	3 AUG 28	---	---	---	---	---

MANUAL - MANUAL SAMPLING

C - COMPLETE MONTH

P - PARTIAL MONTH

* - EXTREME FOR PERIOD OF RECORD

DEERLICK CREEK NEAR HINTON - STATION NO. 07AF004

SUSPENDED SEDIMENT FOR 1985

LOCATION: LAT 53 09 36 N LONG 117 14 38 W
 DRAINAGE AREA: 18.0 km²
 TYPE OF FLOW: NATURAL
 TYPE OF GAUGE: RECORDING

TOTAL SUSPENDED SEDIMENT LOAD 98.7 TONNES FOR THE PERIOD APR 01 TO OCT 31

REMARKS:

APR				MAY				JUN			
DAY	DAILY DISCHARGE (m ³ /s)	MEAN CON-CENTRATION (mg/L)	DAILY LOAD (t)	DAILY DISCHARGE (m ³ /s)	MEAN CON-CENTRATION (mg/L)	DAILY LOAD (t)	DAILY DISCHARGE (m ³ /s)	MEAN CON-CENTRATION (mg/L)	DAILY LOAD (t)	DAY	
1	0.037	1	0	0.129	8.5	0.10	0.281	2	0.05	1	
2	0.320	8	0.17	0.255	15.5	0.35	0.304	1.5	0.03	2	
3	0.360	7	0.22	0.318	15	0.41	0.250	4.5	0.09	3	
4	0.300	8	0.13	0.188	8.5	0.13	0.212	1.5	0.02	4	
5	0.250	4	0.09	0.155	7.5	0.09	0.205	1.5	0.02	5	
6	0.190	4	0.07	0.138	4	0.05	0.180	1.5	0.02	6	
7	0.128	3	0.03	0.136	2	0.02	0.183	2.5	0.03	7	
8	0.272	8	0.14	0.141	2.5	0.02	0.283	5.5	0.15	8	
9	0.140	8.5	0.07	0.135	4.5	0.05	0.222	5.5	0.10	9	
10	0.084	2	0.01	0.109	5.5	0.05	0.189	2.5	0.03	10	
11	0.050	1.5	0.01	0.102	2.5	0.02	0.174	0.5	0	11	
12	0.062	1	0.01	0.095	1.5	0.01	0.162	0.5	0	12	
13	0.119	1	0.01	0.089	0.5	0	0.163	0.5	0	13	
14	0.082	1	0.01	0.088	5.5	0.04	0.152	1.5	0.01	14	
15	0.074	1	0.01	0.083	5.5	0.04	0.140	3.5	0.04	15	
16	0.021	1.5	0	0.082	5.5	0.04	0.131	2.5	0.02	16	
17	0.030	4.5	0.01	0.082	3.5	0.02	0.119	3.5	0.03	17	
18	0.010	4.5	0	0.082	2.5	0.01	0.108	2.5	0.02	18	
19	0.000	7.5	0	0.083	1.5	0.01	0.101	2.5	0.02	19	
20	0.017	1.5	0	0.081	3.5	0.02	0.098	2.5	0.02	20	
21	0.021	0.5	0	0.078	4.5	0.03	0.093	2	0.02	21	
22	0.024	1.5	0	0.078	5.5	0.04	0.104	3	0.03	22	
23	0.023	2.5	0.01	0.078	3.5	0.02	0.114	5.5	0.08	23	
24	0.027	3	0.01	0.078	2.5	0.01	1.07	55.5	5.10	24	
25	0.034	3	0.01	0.257	5.5	0.20	1.33	39.5	4.48	25	
26	0.047	3	0.01	0.272	5.5	0.12	0.878	14.5	1.18	26	
27	0.048	5.5	0.03	0.212	4.5	0.07	0.781	3.5	0.20	27	
28	0.058	5.5	0.03	0.258	4.5	0.09	0.827	4.5	0.22	28	
29	0.041	5	0.02	0.394	10.5	0.32	0.538	5.5	0.23	29	
30	0.080	5	0.03	0.345	14.5	0.42	0.488	4.5	0.18	30	
31				0.298	7.5	0.18				31	
TOTAL	2.950		1.14	4.910		2.99	9.760		12.40	TOTAL	

JUL				AUG				SEP			
DAY	DAILY DISCHARGE (m ³ /s)	MEAN CON-CENTRATION (mg/L)	DAILY LOAD (t)	DAILY DISCHARGE (m ³ /s)	MEAN CON-CENTRATION (mg/L)	DAILY LOAD (t)	DAILY DISCHARGE (m ³ /s)	MEAN CON-CENTRATION (mg/L)	DAILY LOAD (t)	DAY	
1	0.410	3.5	0.11	0.041	1.5	0	0.143	3	0.04	1	
2	0.385	3	0.09	0.045	2	0.01	0.135	3	0.03	2	
3	0.309	3	0.08	0.039	2	0.01	0.127	2	0.02	3	
4	0.284	3.5	0.07	0.035	2.5	0.01	0.131	1	0.01	4	
5	0.237	3	0.06	0.030	2	0.01	0.237	13.5	0.27	5	
6	0.189	3	0.05	0.028	2	0	0.384	17.5	0.53	6	
7	0.185	3.5	0.04	0.045	4	0.02	0.280	7	0.22	7	
8	0.165	3	0.04	0.391	29.5	0.98	0.287	2	0.05	8	
9	0.128	3	0.03	0.234	9.5	0.18	0.343	1.5	0.03	9	
10	0.110	3	0.03	0.201	15.5	0.26	0.403	7.5	0.24	10	
11	0.087	4.5	0.03	0.150	10.5	0.13	0.451	18.5	0.70	11	
12	0.100	4	0.03	0.615	34.5	1.51	0.754	33.5	2.15	12	
13	0.113	10.5	0.10	0.550	14.5	0.87	1.32	85.5	9.89	13	
14	0.088	10.5	0.08	0.455	25.5	0.98	0.874	11.5	0.43	14	
15	0.085	9	0.07	1.44	184.5	20.4	0.710	5	0.31	15	
16	0.062	9	0.05	1.07	43.5	3.88	0.586	5.5	0.25	16	
17	0.113	9	0.09	0.799	8	0.62	0.594	5.5	0.24	17	
18	0.082	3.5	0.02	0.830	3	0.18	0.536	3	0.14	18	
19	0.078	3	0.02	0.514	3	0.13	0.470	2.5	0.08	19	
20	0.071	3	0.02	0.783	17.5	1.15	0.427	2	0.07	20	
21	0.080	3.5	0.02	0.713	5.5	0.37	0.381	2	0.07	21	
22	0.060	3	0.02	0.515	1.5	0.04	0.385	2	0.05	22	
23	0.092	3	0.02	0.426	1	0.04	0.342	2	0.05	23	
24	0.123	3	0.03	0.383	0.5	0	0.368	2	0.05	24	
25	0.063	3.5	0.02	0.322	1	0.03	0.364	2	0.05	25	
26	0.069	2	0.01	0.282	2	0.05	0.321	2	0.05	26	
27	0.060	1	0.01	0.242	3	0.05	0.313	2	0.05	27	
28	0.058	0.5	0	0.211	4	0.07	0.278	2	0.05	28	
29	0.055	1	0	0.188	5.5	0.08	0.248	2	0.04	29	
30	0.051	1	0	0.175	4	0.05	0.240	2	0.04	30	
31	0.045	1	0	0.189	4	0.05				31	
TOTAL	3.972		1.25	11.604		32.07	12.362		15.48	TOTAL	

A - MANUAL GAUGE B - ICE CONDITIONS E - ESTIMATED S - SAMPLE(S) COLLECTED THIS DAY

DEERLICK CREEK NEAR HINTON - STATION NO. 07AP004

SUSPENDED SEDIMENT FOR 1985

OCT															
DAY	DAILY DISCHARGE (m ³ /s)	MEAN CON-CENTRATION (mg/L)	DAILY LOAD (t)		DAILY DISCHARGE (m ³ /s)	MEAN CON-CENTRATION (mg/L)	DAILY LOAD (t)		DAILY DISCHARGE (m ³ /s)	MEAN CON-CENTRATION (mg/L)	DAILY LOAD (t)		DAILY DISCHARGE (m ³ /s)	MEAN CON-CENTRATION (mg/L)	DAILY LOAD (t)
1	0.232	2	0.04												1
2	0.211	2	0.04												2
3	0.193	2 S	0.03												3
4	0.172	2	0.03												4
5	0.188	2	0.03												5
6	0.187	2	0.03												6
7	0.181	3	0.04												7
8	0.208	3	0.05												8
9	0.181	4 S	0.05												9
10	0.187	4	0.05												10
11	0.171	4	0.05												11
12	0.184	4	0.05												12
13	0.142	4	0.05												13
14	0.138	4	0.05												14
15	0.149	4	0.05												15
16	0.148	4	0.05												16
17	0.148	4	0.05												17
18	0.138	4	0.05												18
19	0.138	4	0.05												19
20	0.149	4	0.05												20
21	0.144	4	0.05												21
22	0.148	4	0.05												22
23	0.138	4	0.05												23
24	0.130 S	4	0.04												24
25	0.103 S	4	0.04												25
26	0.152 S	4	0.05												26
27	0.088 S	4	0.03												27
28	0.088 S	4	0.03												28
29	0.108 S	4	0.04												29
30	0.101 S	4	0.03												30
31	0.100 S	4	0.03												31
TOTAL	4.808		1.38												TOTAL

S - ICE CONDITIONS

S - SAMPLE(S) COLLECTED THIS DAY

DEERLICK CREEK NEAR HINTON - STATION NO. 07AF004

INSTANTANEOUS SUSPENDED SEDIMENT FOR 1985

DATE	TIME	WATER TEMP. (C)	INSTANT. DISCHARGE (m ³ /s)	SINGLE SAMPLING VERTICAL (m)	WATER TYPE	INSTANT. CONCENT. (mg/L)	DISSOLVED SOLIDS (mg/L)	PERCENT FINER THAN INDICATED SIZE, IN MILLIMETRES	PERCENT SAND SILT CLAY
								.002 .004 .008 .015 .031 .062 .125 .250 .500 1.00 2.00	
APR 09	12:20			0.021 B	MID	DIP	8		
APR 11	12:15	8.0		0.180 B	MID	DIP	1		
APR 15	11:45			0.120 B	MID	DIP	1		
APR 17	14:30			0.153 B	MID	DIP	4		
APR 18	13:10			0.087 B	MID	DIP	4		
APR 20	14:45			0.025 B	MID	DIP	0		
APR 21	12:00			0.031 B	MID	DIP	0		
APR 22	12:20			0.037 B	MID	DIP	1		
APR 23	11:05			0.211 B	MID	DIP	4		
APR 23	14:30			0.211 B	MID	DIP	4		
APR 27	15:30			0.080	MID	DIP	14		
APR 28	09:40			0.134	MID	DIP	5		
MAY 01	15:15			0.094	MID	DIP	8		
MAY 02	18:30			0.252	MID	PUMP	52 A		
MAY 04	09:20			0.213	MID	PUMP	8		
MAY 05	09:40			0.205	MID	PUMP	8		
MAY 08	11:50			0.124	MID	DIP	2		
MAY 09	14:55	2.0		0.140	MID	DIP	5		
MAY 10	14:15			0.102	MID	DIP	5		
MAY 11	11:40			0.095	MID	DIP	7		
MAY 12	08:45			0.127	MID	DIP	1		
MAY 13	14:05	5.0		0.098	MID	DIP	0		
MAY 14	14:25			0.085	MID	DIP	5		
MAY 15	11:55			0.077	MID	DIP	5		
MAY 18	08:55			0.080	MID	DIP	8		
MAY 18	11:55			0.078	MID	DIP	2		
MAY 19	10:35			0.084	MID	DIP	0		
MAY 20	09:40			0.082	MID	DIP	3		
MAY 21	11:15			0.078	MID	DIP	4		
MAY 22	11:40			0.080	MID	DIP	7		
MAY 23	10:10			0.078	MID	DIP	2		
MAY 24	13:50			0.078	MID	DIP	1		
MAY 25	09:00			0.253	MID	DIP	9		
MAY 25	15:15			0.341	MID	DIP	13		
MAY 26	11:30			0.255	MID	DIP	4		
MAY 27	09:50			0.208	MID	DIP	4		
MAY 28	11:50			0.185	MID	DIP	3		
MAY 28	14:05			0.350	MID	DIP	7		
MAY 30	10:10			0.355	MID	DIP	18		
MAY 31	10:30			0.287	MID	DIP	8		
JUN 02	08:35			0.304	MID	DIP	0		
JUN 03	10:00			0.340	MID	DIP	4		
JUN 04	09:50			0.220	MID	DIP	1		
JUN 05	14:00			0.188	MID	DIP	1		
JUN 06	12:10			0.211	MID	DIP	1		
JUN 07	10:15			0.187	MID	DIP	2		
JUN 08	10:10			0.302	MID	DIP	4		
JUN 08	10:05			0.223	MID	DIP	8		
JUN 10	10:30			0.188	MID	DIP	2		
JUN 11	08:20			0.172	MID	DIP	7 A		
JUN 11	12:00E	4.0		0.185	MID	DIP	0		
JUN 12	11:55			0.182	MID	DIP	34 A		
JUN 13	10:05			0.188	MID	DIP	0		
JUN 14	14:40			0.149	MID	DIP	1		
JUN 15	10:40			0.141	MID	DIP	3		
JUN 16	08:55			0.131	MID	DIP	2		
JUN 17	10:40			0.114	MID	DIP	4		
JUN 18	08:45			0.108	MID	DIP	2		
JUN 19	08:50			0.101	MID	DIP	2		
JUN 20	08:00			0.098	MID	DIP	2		
JUN 23	08:50			0.105	MID	DIP	7		
JUN 24	09:25			0.834	MID	DIP	34		
JUN 24	20:54			1.81	MID	DIP	128		
JUN 25	10:20			1.35	MID	DIP	32		
JUN 26	09:10			0.999	MID	DIP	17		
JUN 27	10:15			0.772	MID	DIP	3		
JUN 28	10:40			0.834	MID	DIP	4		
JUN 29	08:25			0.637	MID	DIP	5		
JUN 30	10:35			0.470	MID	DIP	4		
JUL 01	09:35			0.412	MID	DIP	3		
JUL 04	09:10			0.281	MID	DIP	24 A		
JUL 07	09:00			0.185	MID	DIP	3		
JUL 11	13:10			0.095	MID	DIP	4		
JUL 14	11:10			0.095	MID	DIP	10		
JUL 18	09:45			0.085	MID	DIP	3		
JUL 21	09:30			0.080	MID	DIP	3		
JUL 21	09:31			0.081	MID	DH48	3		
JUL 25	09:30			0.085	MID	DIP	3		
JUL 28	08:55			0.057	MID	DIP	1		
AUG 01	14:10			0.040	MID	DIP	2		
AUG 04	08:45			0.035	MID	DIP	2		
AUG 08	13:40			0.854	MID	DIP	39		
AUG 09	22:20			0.235	MID	PUMP	7		
AUG 09	23:20			0.228	MID	PUMP	59		
AUG 10	00:20			0.220	MID	PUMP	105		
AUG 10	01:20			0.208	MID	PUMP	20		
AUG 10	02:20			0.200	MID	PUMP	21		
AUG 10	22:35			0.188	MID	PUMP	12		
AUG 11	00:35			0.182	MID	PUMP	41 A		
AUG 11	01:35			0.178	MID	PUMP	18		
AUG 11	01:35			0.175	MID	PUMP	8		
AUG 11	02:35			0.174	MID	PUMP	0		
AUG 11	03:35			0.171	MID	PUMP	115 A		
AUG 11	04:35			0.187	MID	PUMP	11		
AUG 11	10:35			0.148	MID	DIP	7		
AUG 11	16:35			0.141	MID	PUMP	11		

NOTE : SINGLE VERTICAL LOCATED AT MID (MID STREAM) FOR 1985

TIME SYMBOL: E - ESTIMATED
 DISCHARGE SYMBOL(S): B - ICE CONDITIONS
 CONCENTRATION SYMBOL(S): A - CLASSIFIED AS AN ANOMALY

CONTINUED

DEERLICK CREEK NEAR WINTON - STATION NO. 07AF004 (CONTINUED)

INSTANTANEOUS SUSPENDED SEDIMENT FOR 1985

DATE		TIME	WATER TEMP.	INSTANT. DISCHARGE	SINGLE SAMPLING VERTICAL	TYPE OF SAMPLER	INSTANT. CONCENT. OF SOLIDS	PERCENT FINER THAN INDICATED SIZE, IN MILLIMETRES										PERCENT SAND SILT CLAY				
			[C]	[m ³ /s]	[m]		[mg/L]	[mg/L]	.002	.004	.008	.015	.031	.062	.125	.250	.500	1.00	2.00			
AUG 12	08:45			0.185	MID	PUMP	15															
AUG 12	08:45			0.209	MID	PUMP	30															
AUG 12	07:45			0.281	MID	PUMP	21															
AUG 12	08:45			0.321	MID	PUMP	38															
AUG 12	09:45			0.408	MID	PUMP	38															
AUG 12	10:45			0.500	MID	PUMP	82															
AUG 12	11:45			0.577	MID	PUMP	50															
AUG 12	12:45			0.639	MID	PUMP	63															
AUG 12	15:45			0.758	MID	PUMP	41															
AUG 12	22:15			0.748	MID	PUMP	31															
AUG 13	09:15			0.557	MID	PUMP	11															
AUG 13	17:25	8.0		0.481	MID	SH48	11	128														
AUG 13	17:45			0.503	MID	PUMP	85	A														
AUG 14	03:45			0.456	Y	MID	PUMP	21														
AUG 14	15:45			0.456	Y	MID	PUMP	19														
AUG 14	20:10			0.456	Y	MID	PUMP	18														
AUG 14	23:10			0.456	Y	MID	PUMP	85														
AUG 15	13:10			1.44	V	MID	PUMP	221														
AUG 15	14:30			1.44	V	MID	PUMP	139														
AUG 15	15:10			1.44	V	MID	PUMP	288	A													
AUG 15	22:10			1.44	V	MID	PUMP	58														
AUG 16	00:10			1.28	MID	PUMP	47															
AUG 16	07:10			1.14	MID	PUMP	54															
AUG 16	17:10			1.00	MID	PUMP	27															
AUG 20	15:15			1.01	MID	PUMP	38															
AUG 20	16:15			1.05	MID	PUMP	58															
AUG 20	18:15			1.09	MID	PUMP	34															
AUG 20	21:15			1.02	MID	PUMP	28															
AUG 20	22:15			0.980	MID	PUMP	20															
AUG 20	23:15			0.959	MID	PUMP	12															
AUG 21	00:15			0.931	MID	PUMP	4															
AUG 21	01:15			0.905	MID	PUMP	20															
AUG 21	03:15			0.848	MID	PUMP	10															
AUG 21	04:15			0.830	MID	PUMP	11															
AUG 21	05:15			0.813	MID	PUMP	11															
AUG 21	08:15			0.785	MID	PUMP	5															
AUG 22	07:25			0.529	MID	DIP	1															
AUG 24	11:45			0.384	MID	DIP	0															
AUG 29	09:00			0.191	MID	DIP	5															
SEP 05	09:00			0.120	MID	DIP	1															
SEP 05	18:05			0.285	MID	PUMP	18															
SEP 05	18:05			0.400	MID	PUMP	28															
SEP 05	19:05			0.428	MID	PUMP	39															
SEP 05	20:05			0.443	MID	PUMP	29															
SEP 05	23:05			0.453	MID	PUMP	21															
SEP 05	03:05			0.428	MID	PUMP	16															
SEP 05	14:05			0.338	MID	PUMP	18															
SEP 09	10:50			0.323	MID	DIP	0															
SEP 10	16:05	7.0		0.321	MID	DIP	4	123														
SEP 11	20:20			0.438	MID	PUMP	22															
SEP 12	10:00			0.440	MID	PUMP	1															
SEP 12	17:00			0.709	MID	PUMP	21															
SEP 12	18:00			0.917	MID	PUMP	49															
SEP 12	19:00			1.18	MID	PUMP	55															
SEP 12	20:00			1.38	MID	PUMP	105															
SEP 12	21:00			1.52	MID	PUMP	127															
SEP 12	22:00			1.79	MID	PUMP	127															
SEP 12	23:00			1.92	MID	PUMP	119															
SEP 12	23:59			1.92	MID	PUMP	114															
SEP 13	02:00			1.84	MID	PUMP	297															
SEP 13	03:00			1.59	MID	PUMP	110															
SEP 13	04:00			1.92	MID	PUMP	127															
SEP 13	13:00			1.29	MID	PUMP	84															
SEP 14	11:45			0.870	MID	SH48	5															
SEP 16	09:05			0.610	MID	PUMP	5															
SEP 17	09:05			0.550	MID	PUMP	5															
SEP 19	14:40			0.451	MID	DIP	2															
OCT 03	10:50			0.192	MID	DIP	2															
OCT 09	16:10	0.0		0.187	MID	DIP	4	124														

NOTE: SINGLE VERTICAL LOCATED AT MID (MID STREAM) FOR 1985

DISCHARGE SYMBOL(S): V - DAILY MEAN, MANUAL GAUGE V - DAILY MEAN, ESTIMATED
CONCENTRATION SYMBOL(S): A - CLASSIFIED AS AN ANOMALY

DEERLICK CREEK NEAR HINTON - STATION NO. 07AF004

HISTORICAL SEDIMENT DATA SUMMARY

YEAR	PERIOD OF OPERATION SUMMARY	TYPE OF SAMPLING	SAMPLED CONCENTRATION		SUSPENDED SEDIMENT LOAD		SUMMARY : APR-OCT			
			MAXIMUM	MINIMUM	MAXIMUM DAILY	TOTAL PERIOD	MEAN LOAD (TONNES)	HISTORICAL MEAN LOAD (TONNES)	STANDARD ERROR OF MEAN %	
			(mg/L)	(mg/L)	(TONNES)	(TONNES)				
(JFMAMJJASOND)										
1967	----CCCCC--	MANUAL	13 JUN 18	0 JUN 05 *	13.3 JUN 09	31.9	---	---	---	
1968	----CCCCC--	MANUAL	20 JUL 24	3 JUN 26	5.86 JUL 22	37.4	---	---	---	
1969	----CCCCC--	MANUAL	787 AUG 05	2 AUG 27	128 JUL 05	248	---	---	---	
1970	---CCCCCCC--	MANUAL	34 JUN 17	0 AUG 18	9.85 JUN 16	32.4	---	---	---	
1971	---CCCCCCC--	MANUAL	138 JUN 08	1 SEP 16	26.2 JUN 09	112	0.52	0.52	---	
1972	---CCCCCCC--	MANUAL	224 JUN 25	1 AUG 23	35.6 JUN 25	115	---	---	---	
1973	---CCCCCCC-	MANUAL	205 MAY 16	1 AUG 02	16.2 MAY 16	101	0.47	0.50	5.1	
1974	---CCCCCCC--	MANUAL	133 MAY 06	1 AUG 13	12.4 MAY 06	78.6	0.37	0.45	9.8	
1975	---CCCCCCC--	MANUAL	375 MAY 06	1 SEP 10	8.15 MAY 09	75.2	0.35	0.43	9.4	
1976	---CCCCCCC--	MANUAL	920 JUN 16	2 JUL 27	46.0 JUN 16	171	0.80	0.90	18.2	
1977	---CCCCCCC--	MANUAL	262 JUL 05	3 JUN 26	15.8 JUL 06	215	1.00	0.59	18.0	
1978	---CCCCCCC--	MANUAL	254 APR 28	2 OCT 11	35.1 MAY 16	247	1.15	0.57	18.0	
1979	---CCCCCCC--	MANUAL	556 MAY 17	0 JUL 30	29.0 MAY 17	92.6	---	---	---	
1980	---CCCCCCC--	MANUAL	142 MAY 26	1 JUL 24	251 JUN 04	560 *	---	---	---	
1981	---CCCCCCC--	MANUAL	150 MAY 15	1 JUN 28	10.2 MAY 15	71.8	---	---	---	
1982	---CCCCCCC-	MANUAL	1 090 JUL 04 *	1 AUG 13	285 JUL 04 *	532	2.48	0.89	28.1	
1983	---CCCCCCC-	MANUAL	148 JUN 24	0 AUG 05	8.86 JUN 24	36.9	0.17	0.81	28.9	
1984	---CCCCCCC--	MANUAL	120 JUN 08	0 MAY 23	7.70 JUN 08	28.2	0.13	0.74	28.6	
1985	---CCCCCCC--	MANUAL	297 SEP 13	0 APR 20	20.4 AUG 15	58.7	0.32	0.71	28.6	

MANUAL - MANUAL SAMPLING

C - COMPLETE MONTH

P - PARTIAL MONTH

* - EXTREME FOR PERIOD OF RECORD

DRIFTPILE RIVER NEAR DRIFTPILE - STATION NO. 07B0003

SUSPENDED SEDIMENT FOR 1985

LOCATION: LAT 55 20 48 N LONG 115 47 39 W
 DRAINAGE AREA: 837 km²
 TYPE OF FLOW: NATURAL
 TYPE OF GAUGE: RECORDING

TOTAL SUSPENDED SEDIMENT LOAD 128 000 TONNES FOR THE PERIOD APR 15 TO OCT 31

REMARKS:

DAY	APR			*	MAY			*	JUN			DAY
	DAILY DISCHARGE (m ³ /s)	MEAN CON-CENTRATION (mg/L)	DAILY LOAD (t)		DAILY DISCHARGE (m ³ /s)	MEAN CON-CENTRATION (mg/L)	DAILY LOAD (t)		DAILY DISCHARGE (m ³ /s)	MEAN CON-CENTRATION (mg/L)	DAILY LOAD (t)	
1	0.566 B			*	20.1	555 S	884	*	7.08	204 S	124	1
2	0.784 B			*	28.8	1 350 S	3 340	*	5.84	145 S	71.1	2
3	0.964 B			*	56.0	2 880 S	14 800	*	4.77	119	48.0	3
4	0.839 B			*	67.1	2 890 S	16 800	*	3.95	118 S	40.4	4
5	0.833 B			*	49.8	1 440 S	6 210	*	3.57	87	29.9	5
6	0.761 B			*	39.1	1 010 S	3 410	*	3.20	79 S	21.8	6
7	0.719 B			*	34.9	843 S	2 840	*	2.88	80	19.9	7
8	1.05 B			*	32.8	870 S	2 470	*	2.55	81	18.1	8
9	2.00 B			*	31.5	772 S	2 100	*	2.45	82	17.4	9
10	6.47 B			*	28.6	897 S	2 220	*	2.39	80	18.6	10
11	12.1 B			*	25.2	1 150 S	2 830	*	2.26	79	16.4	11
12	12.3 B			*	25.4	749 S	1 710	*	2.11	78	14.4	12
13	15.5 B			*	22.8	1 140 S	2 230	*	1.94	80	13.4	13
14	37.0 B			*	21.7	736 S	1 380	*	1.81	85 S	13.3	14
15	30.3 A	1 140 S	2 980	*	20.4	552 S	973	*	1.75	88	13.1	15
16	25.5	745 S	1 840	*	19.7	500 S	851	*	2.44	107	22.8	16
17	26.8	802 S	2 090	*	20.5	859 S	1 170	*	5.89	635 S	323	17
18	28.4	908 S	2 300	*	22.6	573 S	1 120	*	4.80	181 S	70.4	18
19	25.1	793 S	1 790	*	18.5	503	804	*	3.35	94 S	27.3	19
20	26.1	883 S	1 820	*	15.5	482 S	659	*	2.82	84	20.5	20
21	15.2	491	845	*	13.4 A	430 S	498	*	2.87	86	21.3	21
22	8.74 A	329 S	245	*	11.5 A	412 S	413	*	4.10	107 S	37.9	22
23	12.4	500	536	*	9.89 A	355 S	303	*	4.07	88	34.5	23
24	14.8	820 S	782	*	8.24 A	212 S	151	*	8.17	489 S	345	24
25	15.3	850	915	*	8.97	181 S	148	*	41.3	2 920 S	10 400	25
26	19.3	555	925	*	8.18	262 S	185	*	23.3	808 S	1 830	26
27	20.3	560 S	882	*	6.84	183 S	110	*	14.4	430 S	538	27
28	21.7	530 S	1 180	*	6.82	151 S	89.0	*	10.1	259 S	225	28
29	19.3	585 S	975	*	5.41	191 S	155	*	7.55	204 S	133	29
30	19.1	485 S	767	*	6.37	232 S	188	*	5.87	261 S	128	30
31				*	7.80	275 S	188	*				31
TOTAL	424.035		20 875	*	703.40		70 707.0	*	188.83		14 432.2	TOTAL

DAY	JUL			*	AUG			*	SEP			DAY
	DAILY DISCHARGE (m ³ /s)	MEAN CON-CENTRATION (mg/L)	DAILY LOAD (t)		DAILY DISCHARGE (m ³ /s)	MEAN CON-CENTRATION (mg/L)	DAILY LOAD (t)		DAILY DISCHARGE (m ³ /s)	MEAN CON-CENTRATION (mg/L)	DAILY LOAD (t)	
1	4.45	127 S	48.8	*	0.725 E	8	0.50	*	0.850	14	1.03	1
2	3.85	77 S	24.3	*	0.855 E	8	0.45	*	1.35	15	1.75	2
3	3.13	75 S	20.3	*	0.810 E	8	0.42	*	1.45	18 S	2.00	3
4	2.81	70	17.0	*	0.575 E	8	0.45	*	1.41	10 S	1.22	4
5	2.67	60	13.8	*	0.558 A	8 S	0.39	*	2.08	40 S	7.19	5
6	2.38	54	11.1	*	0.585 E	8	0.44	*	5.88	532	318	6
7	2.10	51	9.28	*	0.580 E	8	0.39	*	5.75	349	173	7
8	1.88	41	8.55	*	0.600 E	8	0.41	*	4.53	125	48.8	8
9	1.74	28	3.75	*	0.700 E	7	0.42	*	4.12	34	12.1	9
10	1.62	18	2.83	*	0.820 E	9	0.84	*	3.57	25	8.02	10
11	1.83	21	3.33	*	0.870 E	7	0.53	*	3.08	32	8.52	11
12	1.71	12 S	1.77	*	0.800 E	8	0.82	*	2.97	38 S	8.77	12
13	1.59	8	1.24	*	0.680 E	7	0.40	*	2.87	32 S	8.21	13
14	1.51	8	1.17	*	0.687 A	8 S	0.46	*	12.3 A	529 S	582	14
15	1.87	11	1.59	*	1.27 A	21 S	2.30	*	10.3 A	481 S	410	15
16	1.57	14	1.80	*	2.30 E	53	10.5	*	8.04	150 S	104	16
17	1.45	13	1.63	*	3.84 A	77 S	18.9	*	12.7	337 S	480	17
18	1.28	13 S	1.42	*	2.20 E	81	11.5	*	13.8	490 S	572	18
19	1.18	10	1.02	*	1.69 A	37 S	8.40	*	8.73	211 S	159	19
20	1.08	13	1.20	*	1.38 E	31	3.70	*	6.80	278 S	182	20
21	0.831	15	1.21	*	1.20 E	24	2.49	*	8.89	1 030 S	781	21
22	0.857	15	1.12	*	1.02 E	18	1.59	*	31.5	1 190 S	3 240	22
23	0.788	13	0.90	*	0.885 E	13	0.98	*	22.5	455 S	904	23
24	0.768	19	1.28	*	0.778 A	9 S	0.80	*	19.7	537 S	1 080	24
25	0.715	24	1.48	*	0.890 E	9	0.89	*	28.9	1 020 S	2 840	25
26	1.73	21 S	3.14	*	0.875 A	8 S	0.87	*	22.2	1 890 S	3 240	26
27	1.88	19 S	3.09	*	1.08	8	0.75	*	29.7	918 S	2 380	27
28	1.85	14	2.24	*	0.916	9	0.71	*	18.7	390 S	830	28
29	1.34 A	9 S	1.04	*	0.829	10	0.72	*	13.2	323 S	368	29
30	1.18 E	8	0.82	*	0.878	12 S	0.91	*	10.3	221 S	197	30
31	0.893 A	11 S	0.85	*	0.712	12	0.74	*				31
TOTAL	54.442		191.23	*	31.209		69.78	*	319.670		18 495.71	TOTAL

A - MANUAL GAUGE B - ICE CONDITIONS E - ESTIMATED S - SAMPLE(S) COLLECTED THIS DAY

DRIFTPILE RIVER NEAR DRIFTPILE - STATION NO. 078W003

SUSPENDED SEDIMENT FOR 1985

OCT										
DAY	DAILY DISCHARGE (m ³ /s)	MEAN CON-CENTRATION (mg/L)	DAILY LOAD (t)	DAILY DISCHARGE (m ³ /s)	MEAN CON-CENTRATION (mg/L)	DAILY LOAD (t)	DAILY DISCHARGE (m ³ /s)	MEAN CON-CENTRATION (mg/L)	DAILY LOAD (t)	DAY
1	8.50	179 S	131							1
2	7.20	180 S	118							2
3	7.49	193	125							3
4	13.2	324 S	370							4
5	10.9	280 S	284							5
6	9.22	259 S	208							6
7	7.88	277 S	184							7
8	6.58	212 S	121							8
9	6.85	157 S	78.6							9
10	5.49	125	59.3							10
11	5.41	128	59.8							11
12	5.85	130 S	63.5							12
13	8.30	107 S	58.2							13
14	9.53	199 S	186							14
15	13.4	237 S	274							15
16	14.8	247 S	318							16
17	14.8	208 S	288							17
18	12.0	181 S	187							18
19	9.47	147 S	120							19
20	8.08	187 S	130							20
21	7.42	188	105							21
22	6.88	148	84.3							22
23	6.33	125	88.4							23
24	6.64	105	51.2							24
25	4.89	84	38.2							25
26	4.54	84	25.1							26
27	3.82	43	14.2							27
28	3.94 A	43 S	14.8							28
29	3.50 E	40	12.1							29
30	3.80 E	35	11.8							30
31	4.05 E	30	10.5							31
TOTAL		238.75	3 711.5							TOTAL

A - MANUAL GAUGE

E - ESTIMATED S - SAMPLE(S) COLLECTED THIS DAY

DRIFTPILE RIVER NEAR DRIFTPILE - STATION NO. 078003

INSTANTANEOUS SUSPENDED SEDIMENT FOR 1985

DATE	TIME	WATER	INSTANT.	SINGLE	TYPE	INSTANT.	DISSOLVED	PERCENT FINER THAN INDICATED SIZE, IN MILLIMETRES											PERCENT		
		TEMP.	DISCHARGE	SAMPLING		CONCENT.	SOLIDS	.002	.004	.008	.015	.031	.062	.125	.250	.500	1.00	2.00	SAND	SILT	CLAY
		(C)	(m ³ /s)	(m)	SAMPLER	(mg/L)	(mg/L)														
APR 15	15:40	1.0	27.0	30.0	DHS9	1140 C	103														
APR 16	18:05	1.0	26.1	30.0	DHS9	831 C															
APR 17	17:30	1.0	28.4	30.0	DHS9	979 C	110														
APR 18	08:00	1.0	30.0	30.0	DHS9	846 C	110	8	8	14	20	31	42	55	88	99	100	58	33	8	
APR 19	08:00	1.0	26.8	30.0	DHS9	780 C															
APR 20	07:30	1.0	27.8	30.0	DHS9	912 C															
APR 22	08:40	1.0	7.95	30.0	DHS9	301 C	116														
APR 24	15:00	4.0	13.2	30.0	DHS9	878 C															
APR 27	07:30	1.0	20.1	30.0	DHS9	828 C															
APR 28	08:30	1.0	22.0	30.0	DHS9	834 C															
APR 28	08:30	1.0	20.1	30.0	DHS9	881 C															
APR 30	06:30	1.0	18.8	30.0	DHS9	494 C															
MAY 01	08:30	2.0	20.3	30.0	DHS9	482 C	107														
MAY 02	08:30	2.0	28.1	30.0	DHS9	872 C	118	8	8	15	20	31	41	48	81	99	100	59	33	8	
MAY 03	08:30	4.0	53.3	30.0	DHS9	3250 C	120	8	11	17	23	38	58	78	91	99	100	42	47	11	
MAY 03	18:30	4.0	81.4	30.0	DHS9	2630 C	111	8	12	18	25	40	58	80	97	100		42	48	12	
MAY 04	08:30	2.0	78.3	30.0	DHS9	3330 C	127	8	12	19	25	41	63	86	98	100		37	51	12	
MAY 05	08:30	2.0	54.8	30.0	DHS9	1700 C	89	8	12	19	24	35	48	67	94	100		52	38	12	
MAY 05	12:40	2.0	51.4	30.0	DHS9	1310 C	105	8	12	20	27	42	56	74	96	100		44	44	12	
MAY 06	08:30	3.0	43.0	30.0	DHS9	1080 C	114	7	10	18	23	36	48	70	98	100		51	39	10	
MAY 07	08:30	3.0	37.3	30.0	DHS9	980 C															
MAY 08	08:30	4.0	34.1	30.0	DHS9	905 C	93														
MAY 08	08:30	5.0	33.1	30.0	DHS9	790 C	92	8	8	15	20	29	38	51	90	99	100	82	30	8	
MAY 10	08:30	4.0	30.2	30.0	DHS9	780 C	88	8	9	15	19	28	38	49	90	99	100	84	27	8	
MAY 11	08:30	4.0	25.7	30.0	DHS9	1370 C															
MAY 12	08:30	4.0	28.1	30.0	DHS9	832 C	86														
MAY 13	08:30	4.0	24.0	30.0	DHS9	1280 C															
MAY 14	08:30	8.0	21.0	30.0	DHS9	787 C															
MAY 15	08:30	8.0	20.6	30.0	DHS9	570 C															
MAY 16	08:30	7.0	18.9	30.0	DHS9	482 C	98														
MAY 17	08:30	7.0	18.7	30.0	DHS9	884 C															
MAY 18	08:00	10.0	23.3	30.0	DHS9	582 C	90														
MAY 20	15:20	14.0	16.9	30.0	DHS9	488 C	94														
MAY 21	08:30	10.0	13.4	V	30.0	DHS9	413 C														
MAY 21	12:25	15.8	13.7	V	30.0	DHS9	434 C														
MAY 22	08:30	12.0	11.8	V	30.0	DHS9	415 C														
MAY 23	08:30	12.0	9.89	V	30.0	DHS9	393 C														
MAY 24	08:30	12.0	8.24	V	30.0	DHS9	218 C	100													
MAY 25	18:30	13.0	9.42	V	30.0	DHS9	184 C	107													
MAY 26	08:30	10.0	8.38	V	30.0	DHS9	271 C														
MAY 27	08:30	11.0	7.03	V	30.0	DHS9	201 C	111													
MAY 28	08:30	11.0	8.48	V	30.0	DHS9	144 C														
MAY 29	08:30	10.0	8.47	V	30.0	DHS9	183 C														
MAY 30	08:30	10.0	9.71	V	30.0	DHS9	217 C														
MAY 31	08:30	11.0	8.05	V	30.0	DHS9	287 C														
JUN 01	08:30	10.0	7.48	V	30.0	DHS9	222 C	113													
JUN 02	08:30	12.0	8.84	V	30.0	DHS9	1310 A	114													
JUN 02	08:31	12.0	8.84	V	30.0	DHS9	188 C	118													
JUN 04	08:30	12.0	4.02	V	30.0	DHS9	119 C														
JUN 05	08:30	18.0	3.28	V	30.0	DHS9	78 C														
JUN 14	08:30	12.0	1.83	V	30.0	DHS9	78 C	151													
JUN 17	12:30	15.0	6.14	V	30.0	DHS9	883 C														
JUN 18	08:30	13.0	4.85	V	30.0	DHS9	200 C														
JUN 19	08:30	16.0	3.48	V	30.0	DHS9	84 C	141													
JUN 22	08:30	12.0	3.76	V	30.0	DHS9	109 C														
JUN 24	08:30	11.0	3.93	V	30.0	DHS9	103 C														
JUN 24	12:00	8.0	4.18	V	30.0	DHS9	118 C														
JUN 25	08:30	9.0	49.8	V	30.0	DHS9	4020 C	189	17	31	35	46	85	82	89	98	100	18	81	21	
JUN 26	08:30	9.0	25.6	V	30.0	DHS9	840 C	118	17	31	33	40	85	84	78	98	100	38	43	21	
JUN 27	08:30	11.0	15.7	V	30.0	DHS9	425 C														
JUN 28	08:30	13.0	10.7	V	30.0	DHS9	370 C														
JUN 28	14:45	13.0	8.84	V	30.0	DHS9	182 C														
JUN 29	08:30	18.0	7.88	V	30.0	DHS9	174 C	117													
JUN 30	12:50	18.0	8.80	V	30.0	DHS9	275 C	132													
JUL 01	17:00	22.0	4.29	V	30.0	DHS9	75 C														
JUL 02	07:30	20.0	3.74	V	30.0	DHS9	70 C														
JUL 03	08:30	17.0	3.21	V	30.0	DHS9	89 C	143													
JUL 12	07:00	18.0	1.75	V	30.0	DHS9	12 C														
JUL 18	07:00	18.0	1.29	V	30.0	DHS9	10 C														
JUL 26	18:00	18.0	2.03	V	30.0	DHS9	25 C														
JUL 27	08:30	14.0	1.84	V	30.0	DHS9	18 C	181													
JUL 28	15:50	23.0	1.21	V	30.0	DHS9	10 C	176													
JUL 31	08:30	18.0	0.893	V	30.0	DHS9	8 C	163													
AUG 05	08:00	18.0	0.858	V	30.0	DHS9	7 C														
AUG 14	09:00	18.0	0.887	V	30.0	DHS9	7 C	181													
AUG 15	07:30	14.0	1.27	V	30.0	DHS9	15 C														
AUG 17	18:00	18.0	2.44	V	30.0	DHS9	84 C														
AUG 19	08:00	18.0	1.89	V	30.0	DHS9	38 C	188													
AUG 24	08:00	18.0	0.778	V	30.0	DHS9	8 C	</													

ALBERTA

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 DRIFTPILE RIVER NEAR DRIFTPILE - STATION NO. 07BH003 (CONTINUED)
 INSTANTANEOUS SUSPENDED SEDIMENT FOR 1985

DATE	TIME	WATER TEMP. [C]	INSTANT. DISCHARGE [m³/s]	SINGLE SAMPLING OF VERTICAL [m]	TYPE SAMPLER	INSTANT. CONCENT. [mg/L]	DISSOLVED SOLIDS [mg/L]	PERCENT FINER THAN INDICATED SIZE, IN MILLIMETRES										PERCENT SAND SILT CLAY
								.002	.004	.008	.016	.031	.062	.125	.250	.500	1.00	2.00
SEP 23	07:38	2.0	23.8	30.0	DH59	538	121											
SEP 23	14:20	3.8	21.8	30.0	DH59	378	112											
SEP 24	07:54	4.0	17.0	30.0	DH59	415												
SEP 25	07:40	8.0	32.8	30.0	DH59	1110	129											
SEP 26	07:30	8.0	21.1	30.0	DH59	1040	128											
SEP 26	07:40	8.0	21.1	30.0	DH59	2830	108											
SEP 27	07:40	4.0	33.1	30.0	DH59	807	108											
SEP 28	08:55	4.0	19.4	30.0	DH59	849 C	119											
SEP 28	08:05	3.0	13.8	30.0	DH59	380 C												
SEP 30	07:30	3.0	10.8	30.0	DH59	338 C												
OCT 01	07:00	5.0	8.81	30.0	DH59	223 C												
OCT 02	11:48	8.0	7.18	30.0	DH59	174 C												
OCT 04	10:12	5.0	13.8	30.0	DH59	191 C	123											
OCT 05	08:20	5.0	11.3	30.0	DH59	308 C												
OCT 06	08:15	4.0	8.80	30.0	DH59	280 C	118											
OCT 07	07:30	3.0	7.88	30.0	DH59	257 C												
OCT 08	08:08	2.0	8.74	30.0	DH59	296 C												
OCT 09	08:25	2.0	5.30	30.0	DH59	227 C												
OCT 12	08:40		5.82	30.0	DH59	189 C												
OCT 12	08:41		5.82	30.0	DH59	142 C	129											
OCT 13	09:05		6.23	30.0	DH59	2340 A	122											
OCT 13	09:06		8.23	30.0	DH59	113 C	124											
OCT 14	08:20		8.27	30.0	DH59	71 C	123											
OCT 15	08:25		12.8	30.0	DH59	194 C												
OCT 16	08:15		14.3	30.0	DH59	224 C												
OCT 17	08:10		15.4	30.0	DH59	285 C	119											
OCT 18	08:35	2.0	12.2	30.0	DH59	216 C	118											
OCT 19	07:25	2.0	9.78	30.0	DH59	183 C												
OCT 20	12:10	3.0	7.93	30.0	DH59	148 C												
OCT 28	11:15	0.5	4.04	30.0	DH59	187 C												
						43 C	130											

NOTE: SINGLE VERTICAL LOCATED AT 30 METRES FOR 1985

CONCENTRATION SYMBOL(S): C - COARSE MATERIAL PRESENT

A - CLASSIFIED AS AN ANOMALY

 DRIFTPILE RIVER NEAR DRIFTPILE - STATION NO. 07BH003
 HISTORICAL SEDIMENT DATA SUMMARY

YEAR	PERIOD OF OPERATION SUMMARY	TYPE OF SAMPLING	SAMPLED CONCENTRATION		SUSPENDED SEDIMENT LOAD		SUMMARY : MAY-OCT		
			MAXIMUM	MINIMUM	MAXIMUM DAILY (TONNES)	TOTAL FOR PERIOD (TONNES)	MEAN LOAD (TONNES)	HISTORICAL MEAN LOAD (TONNES)	STANDARD ERROR OF MEAN %
(JPMANJASOND)			(mg/L)	(mg/L)					
1977	---PPPPPP--	MANUAL	983 APR 15	13 AUG 24	---	---	---	---	---
1978	---CCCCCP--	MANUAL	8 780 JUN 14 *	11 OCT 18	108 000 JUN 14 *	428 000 *	2 310	2 310	---
1980	-P-CCCCCP--	MANUAL	3 340 MAY 28	11 OCT 24	8 060 MAY 28	36 300	185	1 240	88.6
1981	---CCCCCP--	MANUAL	1 370 JUL 24	8 SEP 04	19 300 JUL 23	28 800	150	875	82.0
1982	---PCCCCP--	MANUAL	2 010 AUG 04	2 OCT 13 *	19 300 AUG 04	48 400	---	---	---
1983	---PCCCCP--	MANUAL	4 350 JUN 26	5 JUN 03	98 500 JUN 28	370 000	2 010	1 180	50.1
1984	---CCCCCP--	MANUAL	8 150 JUL 2	9 AUG 12	27 800 JUN 07	148 000	---	---	---
1985	---PCCCCP--	MANUAL	4 020 JUN 28	9 AUG 24	18 800 MAY 04	128 000	585	1 040	44.7
MANUAL - MANUAL SAMPLING									

MANUAL - MANUAL SAMPLING

C - COMPLETE MONTH

P - PARTIAL MONTH

* - EXTREME FOR PERIOD OF RECORD

 EAST PRAIRIE RIVER NEAR EHILDA - STATION NO. 07BP001
 INSTANTANEOUS SUSPENDED SEDIMENT FOR 1985

DATE	TIME	WATER TEMP. [C]	INSTANT. DISCHARGE [m³/s]	SINGLE SAMPLING OF VERTICAL [m]	TYPE SAMPLER	INSTANT. CONCENT. [mg/L]	DISSOLVED SOLIDS [mg/L]	PERCENT FINER THAN INDICATED SIZE, IN MILLIMETRES										PERCENT SAND SILT CLAY
								.002	.004	.008	.016	.031	.062	.125	.250	.500	1.00	2.00
APR 28	10:20	5.0	18.0	20.0	X DH59	1810	145											
MAY 06	14:40	8.5	55.0	20.0	X DH59	4130	138	3	5	7	12	18	22	30	74	98	100	78 17 8
MAY 24	08:45	13.0	14.1	MID	X DH48	414 C	148	6	8	13	18	24	38	49	85	99	100	85 27 8
JUN 25	08:50	14.0	3.33	11.0	X DH59	80 C	208											
JUL 25	09:35	15.0	1.10	MID	X DH48	14	265											
AUG 29	09:45	13.8	1.44	MID	X DH48	13	228											
SEP 24	11:05	8.5	21.8	28.0	X DH59	981	160	18	24	38	47	58	82	77	98	100		38 38 24

NOTE: SINGLE VERTICAL IS UNDETERMINED FOR 1985

CONCENTRATION SYMBOL(S): C - COARSE MATERIAL PRESENT

VERTICAL SYMBOL(S): X - NOT AT REGULAR SINGLE SAMPLE VERTICAL

EAST PRAIRIE RIVER NEAR EHILDA - STATION NO. 07BF001

HISTORICAL SEDIMENT DATA SUMMARY

YEAR	PERIOD OF OPERATION SUMMARY	TYPE OF SAMPLING	SAMPLED CONCENTRATION		SUSPENDED SEDIMENT LOAD			SUMMARY :		
			MAXIMUM	MINIMUM	MAXIMUM DAILY	TOTAL FOR PERIOD		MEAN LOAD	HISTORICAL MEAN LOAD	STANDARD ERROR OF MEAN %
	(JFMAMJJASOND)		(mg/L)	(mg/L)	(TONNES)	(TONNES)		(TONNES)	(TONNES)	
1974	---PP---PPP--	MANUAL	3 500 MAY 08	17 OCT 29	---	---	---	---	---	---
1975	---PPPPPP--	MANUAL	5 730 JUL 19	32 SEP 28	---	---	---	---	---	---
1976	---PPPP--PP--	MANUAL	5 980 JUN 27	48 OCT 07	---	---	---	---	---	---
1977	---PPPPPP--	MANUAL	3 890 APR 13	27 AUG 25	---	---	---	---	---	---
1978	---PPPP--PP--	MANUAL	524 OCT 23	373 SEP 27	---	---	---	---	---	---
1979	---PPPPPP--	MANUAL	5 280 JUL 03	31 SEP 19	---	---	---	---	---	---
1980	---PPPPPP--	MANUAL	835 JUN 03	38 JUL 28	---	---	---	---	---	---
1981	---P--P--PP--	MANUAL	178 MAY 27	21 JUL 07	---	---	---	---	---	---
1982	---PPPP--PP--	MANUAL	10 100 MAY 04	25 OCT 04	---	---	---	---	---	---
1983	---PPPP--P--	MANUAL	12 300 JUN 28 *	55 OCT 24	---	---	---	---	---	---
1984	---PPPPPP--	MANUAL	5 040 JUN 09	33 SEP 24	---	---	---	---	---	---
1985	---PPPPPP--	MANUAL	4 130 MAY 06	13 AUG 29 *	---	---	---	---	---	---

MANUAL - MANUAL SAMPLING

P - PARTIAL MONTH

* - EXTREME FOR PERIOD OF RECORD

EAST STREETER CREEK NEAR NANTON - STATION NO. 05AB024

MONTHLY AND ANNUAL TOTAL VOLUMETRIC BED LOAD IN CUBIC METRES

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL	YEAR
1985	0	0	0	0	0	0	0	0	0	0	0	0	0.0	1985
1986	0	0	0	0.2	0	0.8	0.8	0	0	0	0	0	1.8	1986
1987	0	0	0	0	0.5	0.7	0	0	0	0	0	0	1.2	1987
1988	0	0	0	0	0	0.5	0	0	0	0	0	0	0.5	1988
MEAN	0	0	0	0.1	0.1	0.5	0.2	0	0	0	0	0	0.8	MEAN

BED LOAD MEASURED BY VOLUMETRIC METHOD. MONTHLY DISTRIBUTION ESTIMATED.

ELBOW RIVER AT BRACC CREEK - STATION NO. 05BJ004

INSTANTANEOUS SUSPENDED SEDIMENT FOR 1985

DATE	TIME	WATER TEMP.	INSTANT. DISCHARGE	SINGLE SAMPLING OF VERTICAL SAMPLER	TYPE OF CONCENT.	INSTANT. CONCENT.	DISSOLVED SOLIDS	PERCENT FINER THAN INDICATED SIZE, IN MILLIMETRES										PERCENT SAND SILT CLAY			
								.002	.004	.008	.015	.031	.062	.125	.250	.500	1.00	2.00	SAND	SILT	CLAY
		(C)	(m ³ /s)	(m)		(mg/L)	(mg/L)														
MAY 02	13:50	8.8	8.30 H	MID	X	DH48	9	216													
MAY 22	13:00	9.0	12.0			DH48	18	230													
JUN 21	15:05	11.5	10.9			DH59	6	209													
JUL 22	13:30	15.5	5.49			DH48	3	241													
AUG 14	14:25	11.0	6.80			DH48	5	244													
SEP 13	12:16	7.0	62.5			DH59	345 C	170													
OCT 30	14:45	3.5	6.62			DH48	2	225													

NOTE : SINGLE VERTICAL IS UNDETERMINED FOR 1985

DISCHARGE SYMBOL(S): H - DAILY MEAN
 CONCENTRATION SYMBOL(S): C - COARSE MATERIAL PRESENT
 VERTICAL SYMBOL(S): X - NOT AT REGULAR SINGLE SAMPLE VERTICAL

ELBOW RIVER AT BRASS CREEK - STATION NO. 058J004

HISTORICAL SEDIMENT DATA SUMMARY

YEAR	PERIOD OF OPERATION SUMMARY	TYPE OF SAMPLING	SAMPLED CONCENTRATION				SUSPENDED SEDIMENT LOAD				SUMMARY : MAR-OCT		
			MAXIMUM		MINIMUM		MAXIMUM DAILY		TOTAL FOR PERIOD (TONNES)	MEAN LOAD (TONNES)	HISTORICAL MEAN (TONNES)	STANDARD ERROR OF MEAN %	
			[mg/L]	[mg/L]	[TONNES]	[TONNES]							
[JFMAMJJASOND]													
1968	----C-----	MANUAL	347 JUN 08	10 JUN 21	1 320 JUN 08								
1969	---CCCCC---	MANUAL	1 210 JUN 26 *	0 SEP 08 *	11 700 JUN 28 *			4 890					
1970	---PPP-----	MANUAL	1 200 JUN 18					80 800 *					
1971	---CCCCCCCC--	MANUAL	859 JUN 05	2 APR 27									
1972	CCCCCCCCC---	MANUAL	458 MAY 31	0 MAR 02	5 380 JUN 08			17 900		72.8	72.8		
1973	---CCCCCCCCP-	MANUAL	327 MAY 28	0 MAR 02	1 890 MAY 31			13 900		58.8	84.8	12.4	
1974	---CCCCCCCCP-	MANUAL	1 020 JUN 17	1 APR 05	5 820 MAY 26			7 380		30.0	53.1	23.4	
								34 300		140	74.8	31.3	
1975	---CCCCCCCC--	MANUAL	371 JUN 20	0 MAY 13	1 580 JUN 20			5 050		24.7	84.8	32.0	
1976	---PPPPP-----	MANUAL	5 MAY 03	1 JUN 03									
1977	---PP-PPP-----	MANUAL	7 APR 05	1 MAY 04									
1978	---PP-PPP-----	MANUAL	440 JUN 05	1 AUG 30									
1979	---PP-PPP-----	MANUAL	13 MAY 29	0 JUL 25									
1980	---PP-PP-P---	MANUAL	20 MAY 30	2 JUL 30									
1981	---PPPP-----	MANUAL	940 MAY 26	2 AUG 26									
1982	---PPPP-----	MANUAL	21 JUN 07	1 SEP 28									
1983	---PPPP-----	MANUAL	54 JUN 24	3 AUG 17									
1984	---PPPP-----	MANUAL	59 JUN 11	0 MAY 03									
1985	---PPPPPP---	MANUAL	346 SEP 13	2 OCT 30									
MANUAL - MANUAL SAMPLING													
C - COMPLETE MONTH													
P - PARTIAL MONTH													
* - EXTREME FOR PERIOD OF RECORD													

MANUAL - MANUAL SAMPLING

C - COMPLETE MONTH

P - PARTIAL MONTH

* - EXTREME FOR PERIOD OF RECORD

ELLS RIVER NEAR THE MOUTH - STATION NO. 07DA017

INSTANTANEOUS SUSPENDED SEDIMENT FOR 1985

DATE	TIME	WATER TEMP [C]	INSTANT DISCHARGE [m ³ /s]	SINGLE TYPE SAMPLING OF VERTICAL SAMPLER [m]	INSTANT. CONCENT. [mg/L]	DISSOLVED SOLIDS [mg/L]	PERCENT FINER THAN INDICATED SIZE, IN MILLIMETRES										PERCENT SAND SILT CLAY		
							.002	.004	.008	.015	.031	.062	.125	.250	.500	1.00	2.00		
APR 28	13:35	8.0	33.3	18.0 X DM59	787	144	11	18	27	37	80	77	92	98	100				
JUN 14	13:30	17.0	12.6	20.0 X DM48	118	126											23	51 18	

NOTE : SINGLE VERTICAL IS UNDETERMINED FOR 1985

VERTICAL SYMBOL(S) : X - NOT AT REGULAR SINGLE SAMPLE VERTICAL

ELLS RIVER NEAR THE MOUTH - STATION NO. 07DA017

HISTORICAL SEDIMENT DATA SUMMARY

YEAR	PERIOD OF OPERATION SUMMARY	TYPE OF SAMPLING	SAMPLED CONCENTRATION		SUSPENDED SEDIMENT LOAD		SUMMARY			
			MAXIMUM	MINIMUM	MAXIMUM DAILY	TOTAL FOR PERIOD (TONNES)	MEAN LOAD (TONNES)	HISTORICAL MEAN LOAD (TONNES)	STANDARD ERROR OF MEAN %	
			(µg/L)	(µg/L)	(TONNES)					
(JFMAMJJASOND)										
1976	---PP-PP-P-	MANUAL	1 500 APR 15 *	5 AUG 06	---	---	---	---	---	---
1977	---PPPPPP---	MANUAL	144 APR 26	4 JUN 27	---	---	---	---	---	---
1978	---PPPPPP---	MANUAL	1 480 APR 27	2 AUG 22 *	---	---	---	---	---	---
1979	---PPPPPP---	MANUAL	717 APR 30	8 JUL 26	---	---	---	---	---	---
1980	---PPPPPP---	MANUAL	40 APR 24	2 JUN 24	---	---	---	---	---	---
1981	---P-PP----	MANUAL	41 MAY 28	4 AUG 29	---	---	---	---	---	---
1982	---P-PP----	MANUAL	9 JUN 24	2 AUG 03	---	---	---	---	---	---
1983	---P-PP----	MANUAL	380 APR 28	8 JUN 21	---	---	---	---	---	---
1984	---P-PP----	MANUAL	40 MAY 22	13 SEP 22	---	---	---	---	---	---
1985	---P-PP----	MANUAL	787 APR 28	118 JUN 14	---	---	---	---	---	---
MANUAL - MANUAL SAMPLING										
P - PARTIAL MONTH			* - EXTREME FOR PERIOD OF RECORD							

MANUAL - MANUAL SAMPLING

P - PARTIAL MONTH

* - EXTREME FOR PERIOD OF RECORD

EUNICE CREEK NEAR HINTON - STATION NO. 07AFO05

SUSPENDED SEDIMENT FOR 1985

LOCATION: LAT 53 09 10 N LONG 117 13 55 W
 DRAINAGE AREA: 17.1 km²
 TYPE OF FLOW: NATURAL
 TYPE OF GAUGE: RECORDING

TOTAL SUSPENDED SEDIMENT LOAD 33.8 TONNES FOR THE PERIOD APR 01 TO OCT 31

REMARKS:

APR				MAY				JUN				
DAY	DAILY DISCHARGE (m ³ /s)	MEAN CON-CENTRATION (mg/L)	DAILY LOAD (t)	DAILY DISCHARGE (m ³ /s)	MEAN CON-CENTRATION (mg/L)	DAILY LOAD (t)	DAILY DISCHARGE (m ³ /s)	MEAN CON-CENTRATION (mg/L)	DAILY LOAD (t)		DAY	
1	0.038 B	2	0.01	0.065 B	3 S	0.02	0.148	3	0.04	1		
2	0.140 B		0.05	0.095 B	4	0.03	0.148	1 B	0.01	2		
3	0.220 B		0.11	0.185 B	5	0.08	0.130	1 B	0.01	3		
4	0.175 B		0.08	0.173 B	6 S	0.09	0.121	1 B	0.01	4		
5	0.135 B	4	0.05	0.157 B	6 S	0.07	0.120	2 B	0.02	5		
6	0.100 B	4	0.03	0.138 B	4	0.05	0.116	1 S	0.01	6		
7	0.080 B	3	0.02	0.130 B	2	0.02	0.120	2 S	0.02	7		
8	0.180 B		0.08	0.107 B	2 S	0.02	0.159	5 S	0.07	8		
9	0.070 B	3 S	0.02	0.111 B	5 S	0.06	0.131	4 S	0.05	9		
10	0.075 B	4	0.03	0.080 B	5 S	0.03	0.120	2 S	0.02	10		
11	0.082 B	5 S	0.04	0.075 B	7 S	0.05	0.115	0 S	0	11		
12	0.100 B	4	0.03	0.087 B	2 S	0.01	0.111	1 S	0.01	12		
13	0.105 B	3	0.03	0.073 B	1 S	0.01	0.112	2 S	0.02	13		
14	0.107 B	2	0.02	0.085 B	6 S	0.03	0.107	3 S	0.03	14		
15	0.120 B	1	0.01	0.057 B	7 S	0.03	0.101	3 S	0.03	15		
16	0.151 B	1 S	0.01	0.047	6 S	0.02	0.091	1 S	0.01	16		
17	0.125 B	7 S	0.08	0.038	4 S	0.01	0.084	1 S	0.01	17		
18	0.041 B	3 S	0.01	0.033	3 S	0.01	0.078	1 S	0.01	18		
19	0.113 B	4 S	0.04	0.032	2 S	0.01	0.075	1 S	0.01	19		
20	0.015 B	3 S	0	0.028	1 S	0	0.074	0 S	0	20		
21	0.022 B	1 S	0	0.028	3 S	0.01	0.071	0	0	21		
22	0.033 B	1 S	0	0.029	7 S	0.02	0.081	8 S	0.05	22		
23	0.043 B	1 S	0	0.028	3 S	0.01	0.084	8 S	0.05	23		
24	0.048 B	3	0.01	0.031	2 S	0.01	0.458	87 S	2.71	24		
25	0.058 B	5	0.03	0.098	11 S	0.09	0.495	86 B	2.40	25		
26	0.060 B	7	0.04	0.124	6 S	0.08	0.350	8 S	0.24	26		
27	0.051 B	8 S	0.04	0.113	5 S	0.08	0.311	6 S	0.16	27		
28	0.053 B	6 S	0.03	0.181	7 S	0.11	0.275	4 S	0.10	28		
29	0.066 B	5	0.03	0.214	12 S	0.22	0.249	4 S	0.09	29		
30	0.078 B	4	0.03	0.183	13 S	0.21	0.221	4 S	0.08	30		
31				0.181	7 S	0.10				31		
TOTAL	2.555		0.95	2.991		1.54	4.886		5.28	TOTAL		

JUL				AUG				SEP				DAY
DAY	DAILY DISCHARGE (m ³ /s)	MEAN CON-CENTRATION (mg/L)	DAILY LOAD (t)	DAILY DISCHARGE (m ³ /s)	MEAN CON-CENTRATION (mg/L)	DAILY LOAD (t)	DAILY DISCHARGE (m ³ /s)	MEAN CON-CENTRATION (mg/L)	DAILY LOAD (t)	DAY		
1	0.205	2 S	0.04	0.072	3 S	0.02	0.184	3	0.05	1		
2	0.182	2	0.03	0.072	3	0.02	0.182	3	0.05	2		
3	0.165	2	0.03	0.071	2	0.01	0.173	3	0.04	3		
4	0.152	2 S	0.03	0.071	2 S	0.01	0.173	2	0.03	4		
5	0.141	2	0.02	0.072	2	0.01	0.212	13 S	0.24	5		
6	0.129	1	0.01	0.071	2	0.01	0.227	30 S	0.59	6		
7	0.119	1 S	0.01	0.085	3	0.02	0.194	11	0.18	7		
8	0.111	2	0.02	0.204	24 S	0.42	0.188	4	0.06	8		
9	0.101	3	0.03	0.150	17	0.22	0.205	1 S	0.02	9		
10	0.094	4	0.03	0.148	6 S	0.08	0.233	3 S	0.08	10		
11	0.087	5 S	0.05	0.134	3 S	0.03	0.280	5	0.13	11		
12	0.096	5	0.07	0.261	16 S	0.36	0.458	31 S	1.23	12		
13	0.097	10	0.08	0.248	27 S	0.58	0.895	85 S	5.54	13		
14	0.084	8 S	0.07	0.216	17 S	0.32	0.642	10 S	0.55	14		
15	0.076	8	0.05	0.812	86 S	4.63	0.514	4	0.18	15		
16	0.073	5	0.03	0.520	25 S	1.34	0.426	3 S	0.11	16		
17	0.089	8	0.06	0.457	14	0.55	0.403	4	0.14	17		
18	0.075	2 S	0.01	0.388	6 S	0.19	0.383	4	0.13	18		
19	0.073	1	0.01	0.313	3	0.04	0.314	2 S	0.05	19		
20	0.071	2	0.01	0.494	18	0.77	0.283	2	0.05	20		
21	0.087	3 S	0.02	0.418	17	0.51	0.259	2	0.04	21		
22	0.088	2	0.01	0.325	6 S	0.17	0.243	2	0.04	22		
23	0.085	2	0.01	0.288	3	0.07	0.231	2	0.04	23		
24	0.089	4	0.03	0.282	0 S	0	0.238	1	0.02	24		
25	0.079	2 S	0.01	0.251	0	0	0.233	1	0.02	25		
26	0.074	1	0.01	0.233	1	0.02	0.219	2	0.04	26		
27	0.072	1	0.01	0.219	2	0.04	0.215	2	0.04	27		
28	0.071	0 S	0	0.206	2	0.04	0.240	7	0.15	28		
29	0.071	0	0	0.155	3 S	0.05	0.196	7	0.12	29		
30	0.071	0	0	0.194	4	0.07	0.193	5	0.08	30		
31	0.075	0	0	0.193	3	0.05				31		
TOTAL	3.052		0.79	7.722		10.78	8.787		11.05	TOTAL		

B - ICE CONDITIONS

S - SAMPLE(S) COLLECTED THIS DAY

EUNICE CREEK NEAR WINTON - STATION NO. 07AFO05

SUSPENDED SEDIMENT FOR 1985

OCT					NOV					DEC				
DAY	DAILY DISCHARGE (m ³ /s)	MEAN CON-CENTRATION (mg/L)	DAILY LOAD (t)	S	DAILY DISCHARGE (m ³ /s)	MEAN CON-CENTRATION (mg/L)	DAILY LOAD (t)	S	DAY	DAILY DISCHARGE (m ³ /s)	MEAN CON-CENTRATION (mg/L)	DAILY LOAD (t)	S	DAY
1	0.189	5	0.08	*				*					*	
2	0.181	5	0.08	*				*					*	1
3	0.170	5 S	0.07	*				*					*	2
4	0.180	4	0.08	*				*					*	3
5	0.181 A	4	0.08	*				*					*	4
6				*				*					*	5
7	0.183 A	4	0.08	*				*					*	6
8	0.183	3	0.08	*				*					*	7
9	0.339	15	0.44	*				*					*	8
10	0.253	11 S	0.24	*				*					*	9
	0.180	5	0.08	*				*					*	10
11	0.184	5	0.07	*				*					*	11
12	0.148	5	0.08	*				*					*	12
13	0.142	5	0.08	*				*					*	13
14	0.138	5	0.08	*				*					*	14
15	0.143	5	0.08	*				*					*	15
16				*				*					*	16
17	0.141	5	0.08	*				*					*	17
18	0.138	5	0.08	*				*					*	18
19	0.134	5	0.08	*				*					*	19
20	0.132	5	0.08	*				*					*	20
21	0.130	5	0.08	*				*					*	21
22	0.125	5	0.08	*				*					*	22
23	0.120	5	0.08	*				*					*	23
24	0.117 B	5	0.08	*				*					*	24
25	0.117 B	5	0.08	*				*					*	25
26				*				*					*	26
27	0.291 B	5	0.13	*				*					*	27
28	0.171 B	5	0.07	*				*					*	28
29	0.085 B	5	0.03	*				*					*	29
30	0.072 B	5	0.03	*				*					*	30
31	0.110 B	5	0.05	*				*					*	31
TOTAL	4.747		2.41	*				*					*	TOTAL

A - MANUAL GAUGE B - ICE CONDITIONS

S - SAMPLE(S) COLLECTED THIS DAY

EUNICE CREEK NEAR HINTON - STATION NO. 07AF005

INSTANTANEOUS SUSPENDED SEDIMENT FOR 1985

DATE	TIME	WATER TEMP.	INSTANT. DISCHARGE	SINGLE SAMPLING VERTICAL	TYPE OF SAMPLER	INSTANT. CONCENT.	DISSOLVED SOLIDS	PERCENT FINER THAN INDICATED SIZE, IN MILLIMETRES										PERCENT SAND SILT CLAY	
								.002	.004	.008	.015	.031	.062	.125	.250	.500	1.00		2.00
		[C]	[m ³ /s]			[mg/L]	[mg/L]												
APR 09	13:46		0.070	8	MID	DIP	3												
APR 11	13:25	1.0	0.092	8	MID	DIP	5												
APR 16	10:55		0.151	8	MID	DIP	6												
APR 17	15:30		0.126	8	MID	DIP	9												
APR 18	12:55		0.041	8	MID	DIP	1												
APR 19	10:40		0.113	8	MID	DIP	5												
APR 20	14:05		0.015	8	MID	DIP	3												
APR 21	11:30		0.022	8	MID	DIP	1												
APR 22	11:30		0.022	8	MID	DIP	1												
APR 23	10:33		0.043	8	MID	DIP	1												
APR 23	14:28		0.043	8	MID	DIP	1												
APR 27	15:00		0.051	8	MID	DIP	10												
APR 28	09:00		0.053	8	MID	DIP	5												
MAY 01	15:00		0.085	8	MID	DIP	3												
MAY 04	09:08		0.173	8	MID	PUMP	8												
MAY 05	09:13		0.157	8	MID	PUMP	8												
MAY 09	15:30	2.0	0.111	8	MID	DIP	7												
MAY 10	14:05		0.099	8	MID	DIP	4												
MAY 11	11:30		0.074	8	MID	DIP	10												
MAY 12	08:35		0.105	8	MID	DIP	1												
MAY 13	13:40		0.085	8	MID	DIP	1												
MAY 14	14:00		0.061	8	MID	DIP	7												
MAY 16	11:49		0.054	8	MID	DIP	7												
MAY 16	08:47		0.045	8	MID	DIP	5												
MAY 17	08:54		0.037	8	MID	DIP	4												
MAY 18	11:28		0.031	8	MID	DIP	3												
MAY 19	11:12		0.031	8	MID	DIP	3												
MAY 20	09:33		0.030	8	MID	DIP	0												
MAY 21	11:03		0.027	8	MID	DIP	2												
MAY 22	11:23		0.029	8	MID	DIP	5												
MAY 23	10:00		0.028	8	MID	DIP	3												
MAY 24	13:17		0.029	8	MID	DIP	3												
MAY 25	08:40		0.084	8	MID	DIP	10												
MAY 26	14:55		0.134	8	MID	DIP	17												
MAY 26	11:07		0.123	8	MID	DIP	4												
MAY 27	08:42		0.115	8	MID	DIP	5												
MAY 28	11:18		0.128	8	MID	DIP	5												
MAY 29	12:30		0.202	8	MID	DIP	11												
MAY 30	09:43		0.188	8	MID	DIP	15												
MAY 31	09:55		0.180	8	MID	DIP	7												
JUN 02	09:08		0.156	8	MID	DIP	0												
JUN 03	09:21		0.132	8	MID	DIP	3												
JUN 04	09:30		0.130	8	MID	DIP	1												
JUN 05	13:35		0.130	8	MID	DIP	3												
JUN 06	11:33		0.115	8	MID	DIP	0												
JUN 07	10:20		0.106	8	MID	DIP	1												
JUN 08	10:00		0.185	8	MID	DIP	5												
JUN 09	10:00		0.139	8	MID	DIP	5												
JUN 10	10:21		0.120	8	MID	DIP	3												
JUN 11	09:00	2.0	0.114	8	MID	DN48	0												
JUN 11	09:08	2.0	0.114	8	MID	DIP	10 A												
JUN 12	11:45		0.111	8	MID	DIP	43 A												
JUN 13	09:54		0.110	8	MID	DIP	1												
JUN 14	14:43		0.107	8	MID	DIP	3												
JUN 16	10:13		0.102	8	MID	DIP	3												
JUN 16	09:45		0.092	8	MID	DIP	3												
JUN 17	10:00		0.082	8	MID	PUMP	0												
JUN 18	08:50		0.079	8	MID	PUMP	1												
JUN 19	08:45		0.075	8	MID	PUMP	2												
JUN 20	08:10		0.075	8	MID	DIP	0												
JUN 23	08:30		0.085	8	MID	DIP	4												
JUN 24	08:18		0.483	8	MID	DIP	8												
JUN 24	20:21		0.854	8	MID	DIP	170												
JUN 25	09:40		0.495	8	MID	DIP	34												
JUN 26	09:00		0.354	8	MID	DIP	7												
JUN 27	10:07		0.315	8	MID	DIP	7												
JUN 28	10:42		0.380	8	MID	DIP	4												
JUN 29	09:20		0.253	8	MID	DIP	5												
JUN 30	09:18		0.233	8	MID	DIP	4												
JUL 01	09:24		0.208	8	MID	DIP	3												
JUL 04	09:00		0.152	8	MID	DIP	3												
JUL 07	08:50		0.119	8	MID	DIP	1												
JUL 11	12:55		0.095	8	MID	DIP	5												
JUL 14	10:55		0.084	8	MID	DIP	5												
JUL 15	09:25		0.074	8	MID	DIP	1												
JUL 21	09:15		0.070	8	MID	DIP	3												
JUL 21	13:00		0.099	8	MID	DN48	5												
JUL 25	09:15		0.080	8	MID	DIP	3												
JUL 28	08:47		0.071	8	MID	DIP	0												
AUG 01	14:00		0.070	8	MID	DIP	3												
AUG 04	08:45		0.071	8	MID	DIP	2												
AUG 08	13:05		0.300	8	MID	DIP	35												
AUG 10	03:15		0.148	8	MID	PUMP	3												
AUG 10	04:15		0.145	8	MID	PUMP	5												
AUG 10	05:15		0.146	8	MID	PUMP	13												
AUG 10	06:15		0.143	8	MID	PUMP	91 A												
AUG 10	07:15		0.142	8	MID	PUMP	13												
AUG 10	08:15		0.141	8	MID	PUMP	5												
AUG 10	09:15		0.143	8	MID	PUMP	7												
AUG 11	10:25		0.133	8	MID	DIP	3												
AUG 12	18:13		0.371	8	MID	PUMP	33												
AUG 13	05:12	7.0	0.253	8	MID	PUMP	28												
AUG 13	15:55	7.0	0.234	8	MID	DN48	9	124											
AUG 13	17:34	7.0	0.219	8	MID	PUMP	28												
AUG 14	10:34		0.194	8	MID	PUMP	18												
AUG 14	20:20		0.283	8	MID	PUMP	14												
AUG 14	21:20		0.294	8	MID	PUMP	9												
AUG 14	22:20		0.303	8	MID	PUMP	12												
AUG 14	23:20		0.341	8	MID	PUMP	11												

NOTE: SINGLE VERTICAL LOCATED AT MID (MID STREAM) FOR 1985

DISCHARGE SYMBOL(S): 8 - ICE CONDITIONS
CONCENTRATION SYMBOL(S): A - CLASSIFIED AS AN ANOMALY

CONTINUED

EUNICE CREEK NEAR HINTON - STATION NO. 07AFOOS (CONTINUED)

INSTANTANEOUS SUSPENDED SEDIMENT FOR 1985

DATE	TIME	WATER TEMP. (°C)	INSTANT. DISCHARGE (m³/s)	SINGLE VERTICAL SAMPLING (m)	TYPE OF SAMPLER	INSTANT. CONCENT. (mg/L)	DISSOLVED SOLIDS (mg/L)	PERCENT FINER THAN INDICATED SIZE, IN MILLIMETRES	PERCENT SAND SILT CLAY
								.002 .004 .008 .015 .031 .052 .125 .250 .500 1.00 2.00	
AUG 18 03:30			0.483	MID	PUMP	32			
AUG 18 04:30			0.516	MID	PUMP	38			
AUG 18 05:30			0.589	MID	PUMP	44			
AUG 18 07:30			0.716	MID	PUMP	74			
AUG 18 13:30			1.07	MID	PUMP	100			
AUG 18 13:30			1.08	MID	PUMP	124			
AUG 18 14:30			1.08	MID	PUMP	136			
AUG 18 15:30			1.05	MID	PUMP	115			
AUG 18 16:30			1.01	MID	PUMP	83			
AUG 18 18:30			0.887	MID	PUMP	55			
AUG 18 21:30			0.800	MID	PUMP	37			
AUG 18 22:30			0.701	MID	PUMP	36			
AUG 18 08:30			0.888	MID	PUMP	28			
AUG 18 10:30			0.374	MID	PUMP	8			
AUG 22 09:18			0.337	MID	DIP	5			
AUG 24 14:38			0.282	MID	DIP	5			
AUG 28 02:48			0.196	MID	DIP	4			
SEP 05 03:45			0.178	MID	DIP	2			
SEP 08 14:30			0.224	MID	PUMP	22			
SEP 08 21:30			0.276	MID	PUMP	25			
SEP 08 01:30			0.287	MID	PUMP	35			
SEP 09 10:36			0.197	MID	DIP	1			
SEP 10 17:20	6.0		0.218	2.4	DH48	5	113		
SEP 12 02:00			0.282	MID	PUMP	7			
SEP 12 05:00			0.276	MID	PUMP	7			
SEP 12 05:51			0.271	MID	DIP	1			
SEP 12 12:00			0.279	MID	PUMP	52			
SEP 12 14:00			0.233	MID	PUMP	34			
SEP 12 16:50			0.488	MID	PUMP	13			
SEP 13 00:50			1.06	MID	PUMP	142			
SEP 13 13:50			0.881	MID	PUMP	89			
SEP 14 11:35			0.848	MID	DIP	4			
SEP 16 22:00			0.391	MID	PUMP	3			
SEP 18 14:00			0.319	MID	DIP	2			
OCT 03 10:30			0.185	MID	DIP	5			
OCT 08 17:00	0.0		0.145	MID	DIP	5	128		

NOTE: SINGLE VERTICAL LOCATED AT MID (MID STREAM) FOR 1985

EUNICE CREEK NEAR HINTON - STATION NO. 07AFOOS

HISTORICAL SEDIMENT DATA SUMMARY

YEAR	PERIOD OF OPERATION SUMMARY	TYPE OF SAMPLING	SAMPLED CONCENTRATION		SUSPENDED SEDIMENT LOAD		SUMMARY : APR-OCT		
			MAXIMUM	MINIMUM	MAXIMUM DAILY	TOTAL FOR PERIOD (TONNES)	MEAN LOAD (TONNES)	HISTORICAL MEAN LOAD (TONNES)	STANDARD ERROR OF MEAN %
(JFMAMJJASOND)			(mg/L)	(mg/L)	(TONNES)				
1987	-----PP--	MANUAL	3 OCT 04	0 SEP 20 *	0.01 OCT 04	---	---	---	---
1988	-----PCCCC--	MANUAL	95 JUN 12	1 SEP 11	4.29 JUN 30	54.2	---	---	---
1989	-----CCCCC--	MANUAL	598 AUG 05	1 JUN 12	125 AUG 05	571	---	---	---
1970	-----CCCCC--	MANUAL	132 MAY 10	1 SEP 08	20.8 JUN 18	71.8	---	---	---
1971	-----CCCCC--	MANUAL	348 JUN 08	1 AUG 11	64.8 JUN 08	299	1.40	1.40	---
1972	-----CCCCC--	MANUAL	358 JUN 25	0 AUG 09	68.8 JUN 25	228	---	---	---
1973	-----CCCCC--	MANUAL	401 JUN 24	1 JUL 10	64.8 MAY 16	411	1.82	1.86	18.7
1974	-----CCCCC--	MANUAL	520 JUL 12	1 AUG 06	8.88 MAY 06	107	0.80	1.27	32.7
1975	-----CCCCC--	MANUAL	126 MAY 08	0 JUN 11	7.58 MAY 09	35.7	0.17	1.00	40.3
1976	-----CCCCC--	MANUAL	111 JUN 18	0 JUL 27	5.18 JUN 18	33.4	0.16	0.83	42.7
1977	-----PCCCCC--	MANUAL	408 MAY 11	0 SEP 14	41.8 MAY 11	463	2.16	1.05	34.7
1978	-----CCCCC--	MANUAL	297 MAY 16	1 SEP 01	45.1 MAY 16	145	0.89	1.00	31.2
1979	-----CCCCC--	MANUAL	370 JUN 20	0 JUL 18	24.3 JUN 20	52.7	---	---	---
1980	-----CCCCC--	MANUAL	130 JUN 02	0 MAY 18	202 JUN 04 *	531	---	---	---
1981	-----CCCCC--	MANUAL	73 MAY 15	1 JUL 05	3.88 JUL 30	32.4	---	---	---
1982	-----CCCCC--	MANUAL	883 JUL 04 *	3 SEP 14	125 JUL 04	334	1.58	1.07	28.1
1983	-----CCCCC--	MANUAL	120 JUN 24	1 JUN 08	7.32 JUN 24	29.2	0.14	0.87	27.8
1984	-----PCCCCC--	MANUAL	141 MAY 16	0 MAY 27	6.50 JUN 08	18.4	0.09	0.88	28.8
1985	-----CCCCC--	MANUAL	170 JUN 24	0 APR 18	6.58 SEP 13	33.8	0.18	0.81	29.5

MANUAL - MANUAL SAMPLING

E - COMPLETE MONTH

P - PARTIAL MONTH

* - EXTREME FOR PERIOD OF RECORD

FIREBAG RIVER NEAR THE MOUTH - STATION NO. 07DC001
INSTANTANEOUS SUSPENDED SEDIMENT FOR 1985

DATE	TIME	WATER TEMP. [C]	INSTANT. DISCHARGE [m ³ /s]	SINGLE SAMPLING VERTICAL [m]	TYPE OF SAMPLER	INSTANT. CONCENT. [mg/L]	DISSOLVED SOLIDS [mg/L]	PERCENT FINER THAN INDICATED SIZE, IN MILLIMETRES										PERCENT			
								.002	.004	.008	.016	.031	.062	.125	.250	.500	1.00	2.00	SAND	SILT	CLAY
APR 28	10:00	1.0	97.8	40.0	X D48	241	113														
JUN 18	10:00	14.0	20.3	48.0	X DH48	7	163														
AUG 21	10:00	16.0	11.5	32.0	X DH48	2	185														

NOTE : SINGLE VERTICAL IS UNDETERMINED FOR 1985

VERTICAL SYMBOL(S): X - NOT AT REGULAR SINGLE SAMPLE VERTICAL

FIREBAG RIVER NEAR THE MOUTH - STATION NO. 07DC001
HISTORICAL SEDIMENT DATA SUMMARY

YEAR	PERIOD OF OPERATION SUMMARY	TYPE OF SAMPLING	SAMPLED CONCENTRATION		SUSPENDED SEDIMENT LOAD		SUMMARY :		
			MAXIMUM [mg/L]	MINIMUM [mg/L]	MAXIMUM DAILY [TONNES]	TOTAL FOR PERIOD [TONNES]	MEAN LOAD [TONNES]	HISTORICAL MEAN LOAD [TONNES]	STANDARD ERROR OF MEAN %
	(JFMAMJJASOND)								
1975	-----PP-P-P-	MANUAL	12 JUN 12	3 NOV 02	---	---	---	---	---
1977	---PPPPPP--	MANUAL	71 APR 27	4 SEP 22	---	---	---	---	---
1978	---P-PPP----	MANUAL	313 APR 29 *	7 JUL 05	---	---	---	---	---
1979	---PPPPPP--	MANUAL	118 MAY 22	8 AUG 23	---	---	---	---	---
1980	---PPPPPP--	MANUAL	48 APR 23	4 OCT 26	---	---	---	---	---
1981	---P-PP----	MANUAL	32 JUL 18	2 AUG 30 *	---	---	---	---	---
1982	---P-PP----	MANUAL	45 MAY 18	8 JUN 23	---	---	---	---	---
1983	---P-PP----	MANUAL	84 APR 28	2 SEP 18	---	---	---	---	---
1984	---P-PP----	MANUAL	35 AUG 11	4 OCT 03	---	---	---	---	---
1985	---P-P-P----	MANUAL	241 APR 28	2 AUG 21	---	---	---	---	---

MANUAL - MANUAL SAMPLING

P - PARTIAL MONTH

* - EXTREME FOR PERIOD OF RECORD

FREEMAN RIVER NEAR FORT ASSINIBOINE - STATION NO. 07AH001
INSTANTANEOUS SUSPENDED SEDIMENT FOR 1985

DATE	TIME	WATER	INSTANT.	SINGLE	TYPE	INSTANT.	DISSOLVED	PERCENT FINER THAN INDICATED SIZE, IN MILLIMETRES										PERCENT		
		TEMP.	DISCHARGE	SAMPLING	OF	CONCENT.	SOLIDS	.002	.004	.008	.016	.031	.062	.125	.250	.500	1.00	2.00	SAND	SILT CLAY
		(C)	(m ³ /s)	(m)	SAMPLER	(mg/L)	(mg/L)													
MAY 29	16:00	8.0	13.9	WERB	DIP	127	C	121												
JUN 19	16:20	17.0	4.43	WERB	DIP	8		146												
JUL 18	11:30		7.86	WERB	DIP	28		186												
AUG 18	12:00	8.0	3.48	WERB	DIP	58		182												
SEP 11	13:00	7.0	4.15	WERB	DIP	8		137												
OCT 08	14:30	2.0	15.2	WERB	DIP	28		104												

NOTE : SINGLE VERTICAL IS UNDETERMINED FOR 1985

CONCENTRATION SYMBOL(S): C - COARSE MATERIAL PRESENT

FREEMAN RIVER NEAR FORT ASSINIBOINE - STATION NO. 07AH001
HISTORICAL SEDIMENT DATA SUMMARY

YEAR	PERIOD OF OPERATION SUMMARY	TYPE OF SAMPLING	SAMPLED CONCENTRATION		SUSPENDED SEDIMENT LOAD		SUMMARY		
			MAXIMUM	MINIMUM	MAXIMUM DAILY	TOTAL FOR PERIOD	MEAN LOAD (TONNES)	HISTORICAL MEAN LOAD (TONNES)	STANDARD ERROR OF MEAN %
			(mg/L)	(mg/L)	(TONNES)	(TONNES)			
(JPMANJJASON)									
1974	-----P--P--	MANUAL	1 200 JUL 15	5 OCT 23	---	---	---	---	---
1975	---PP-PPP---	MANUAL	781 APR 23	5 AUG 19	---	---	---	---	---
1976	---PP-PPP---	MANUAL	297 APR 21	5 JUN 23	---	---	---	---	---
1977	---PP-PPP---	MANUAL	455 APR 18	5 AUG 23	---	---	---	---	---
1978	---PP-PPP--P-	MANUAL	553 JUN 15	10 AUG 30	---	---	---	---	---
1979	---PP-PPP---	MANUAL	2 550 JUN 15 *	7 SEP 20	---	---	---	---	---
1980	---PP-PPP---	MANUAL	1 110 APR 18	9 OCT 15	---	---	---	---	---
1981	---PP-PPP---	MANUAL	285 APR 23	3 SEP 08 *	---	---	---	---	---
1982	---PP-PPP---	MANUAL	114 JUL 08	5 JUN 24	---	---	---	---	---
1983	---PP-PPP---	MANUAL	559 JUL 05	7 AUG 30	---	---	---	---	---
1984	---PP-PPP---	MANUAL	2 340 JUN 03	7 SEP 05	---	---	---	---	---
1985	---PP-PPP---	MANUAL	127 MAY 29	5 JUN 19	---	---	---	---	---
MANUAL - MANUAL SAMPLING									
P - PARTIAL MONTH * - EXTREME FOR PERIOD OF RECORD									

HARTLEY CREEK NEAR FORT MACKAY - STATION NO. 07DA009
INSTANTANEOUS SUSPENDED SEDIMENT FOR 1985

DATE	TIME	WATER TEMP. (C)	INSTANT. DISCHARGE (m ³ /s)	SINGLE VERTICAL SAMPLING OF VERTICAL SAMPLER (m)	TYPE	INSTANT. CONCENT. (mg/L)	DISSOLVED SOLIDS (mg/L)	PERCENT FINER THAN INDICATED SIZE, IN MILLIMETRES										PERCENT SAND SILT CLAY
								.002	.004	.008	.015	.031	.062	.125	.250	.500	1.00	2.00
APR 30	08:35	2.0	7.72	5.0 X	DH48	89	111											
JUN 15	13:40	14.0	1.43	---	DIP	8	185											
AUG 21	09:30	14.0	0.010	---	DIP	8	271											

NOTE : SINGLE VERTICAL LOCATED AT MID (MID STREAM) FOR 1985
VERTICAL SYMBOL(S) : X - NOT AT REGULAR SINGLE SAMPLE VERTICAL

HARTLEY CREEK NEAR FORT MACKAY - STATION NO. 07DA009
HISTORICAL SEDIMENT DATA SUMMARY

YEAR	PERIOD OF OPERATION SUMMARY	TYPE OF SAMPLING	SAMPLED CONCENTRATION		SUSPENDED SEDIMENT LOAD		SUMMARY :		
			MAXIMUM	MINIMUM	MAXIMUM DAILY	TOTAL FOR PERIOD	MEAN LOAD	HISTORICAL MEAN LOAD	STANDARD ERROR OF MEAN %
(JFMAMJJASOND)			(mg/L)	(mg/L)	(TONNES)	(TONNES)	(TONNES)	(TONNES)	
1976	---PP-PPP-P-	MANUAL	58 APR 15	2 NOV 02	---	---	---	---	---
1977	---PPPPPPP--	MANUAL	39 APR 21	3 SEP 22	---	---	---	---	---
1978	---PPPPPPP--	MANUAL	108 AUG 21 *	3 JUN 28	---	---	---	---	---
1979	---PPPPPPP--	MANUAL	40 MAY 03	8 JUN 28	---	---	---	---	---
1980	---PPPPPPP--	MANUAL	54 SEP 18	5 MAY 25	---	---	---	---	---
1981	---P-PP---	MANUAL	12 AUG 29	4 MAY 28	---	---	---	---	---
1982	---PP-PP---	MANUAL	19 MAY 19	1 AUG 03 *	---	---	---	---	---
1983	---P-P-PP---	MANUAL	7 APR 27	2 AUG 05	---	---	---	---	---
1984	---P-PP---	MANUAL	8 SEP 21	4 AUG 11	---	---	---	---	---
1985	---P-P-P---	MANUAL	58 APR 30	6 JUN 15	---	---	---	---	---
MANUAL - MANUAL SAMPLING									
P = PARTIAL MONTH									
* = EXTREME FOR PERIOD OF RECORD									

HIGHWOOD RIVER NEAR THE MOUTH - STATION NO. 05BLO24

INSTANTANEOUS SUSPENDED SEDIMENT FOR 1985

DATE	TIME	WATER TEMP.	INSTANT. DISCHARGE	SINGLE SAMPLING OF VERTICAL	TYPE OF SAMPLER	INSTANT. CONCENT.	DISSOLVED SOLIDS	PERCENT FINER THAN INDICATED SIZE, IN MILLIMETRES										PERCENT SAND	SILT	CLAY
[C]	[m ³ /s]	[m]	[mg/L]	[mg/L]				.002	.004	.008	.015	.031	.062	.125	.250	.500	1.00	2.00		
MAY 02 09:07	10.5	14.2	H	MID	X	DN48	13	348												
MAY 24 09:50	14.5	37.9		38.0	X	DN59	83	177												
JUN 24 18:30	20.5	15.4		17.0	X	DN48	8	174												
JUL 22 09:30	19.5	6.88		17.0	X	DN48	5	194												
AUG 20 18:40	18.0	19.3		34.0	X	DN48	15	191												
SEP 25 10:10	8.0	26.4		50.0	X	DN48	7	205												
OCT 28 09:50	2.5	15.8		50.0	X	DN48	3	212												

NOTE : SINGLE VERTICAL LOCATED AT MID (MID STREAM) FOR 1985

DISCHARGE SYMBOL(S): H - DAILY MEAN
VERTICAL SYMBOL(S): X - NOT AT REGULAR SINGLE SAMPLE VERTICAL

HIGHWOOD RIVER NEAR THE MOUTH - STATION NO. 05BLO24

HISTORICAL SEDIMENT DATA SUMMARY

YEAR	PERIOD OF OPERATION	TYPE OF SAMPLING	SAMPLED CONCENTRATION OF		SUSPENDED SEDIMENT LOAD		SUMMARY : MAR-OCT		
	SUMMARY		MAXIMUM	MINIMUM	MAXIMUM DAILY	TOTAL FOR PERIOD	MEAN LOAD	HISTORICAL MEAN LOAD	STANDARD ERROR OF MEAN
	(JPMANJJASOND)		(mg/L)	(mg/L)	(TONNES)	(TONNES)	(TONNES)	(TONNES)	(TONNES)
1970	----CCCC----	MANUAL	8 870 JUN 14 *	0 AUG 28 *	254 000 JUN 14 *	380 000 *	---	---	---
1971	-----CCC	MANUAL	13 OCT 28	3 OCT 13	5 75 OCT 28	183	---	---	---
1972	CCCCCCCCCCCC	MANUAL	1 480 JUN 01	3 FEB 21	25 700 JUN 01	240 000	880	880	---
1973	CCCCCCCCCCCC	MANUAL	1 310 MAY 26	0 JAN 03	18 300 MAY 27	78 200	323	852	50.4
1974	CCCCCCCCCCCC	MANUAL	1 910 APR 30	0 SEP 04	25 800 JUN 17	321 000	1 310	871	33.3
1975	CCCCCCCCCCCC	MANUAL	3 010 JUN 20	0 SEP 29	75 800 JUN 20	317 000	887	875	23.4
1976	CCCCCCCCCCCC	MANUAL	327 MAY 11	0 DEC 14	7 810 AUG 05	30 400	124	725	30.2
1977	CCCCCCCCCCCC	MANUAL	700 APR 05	1 JUN 28	1 810 APR 05	5 580	22.3	608	35.1
1978	CCCCCCCCCCCC	MANUAL	1 030 JUN 05	2 SEP 24	13 400 JUN 05	102 000	415	580	31.5
1979	CCCCCCCCCCEP	MANUAL	835 MAY 24	0 JUL 13	7 880 MAY 27	48 100	200	533	31.0
1980	--CCCCCCECP	MANUAL	1 350 JUN 03	4 NOV 05	15 300 JUN 03	103 000	421	520	28.1
1981	--PPPP-PPP--	MANUAL	1 340 MAY 21	3 SEP 28	---	---	---	---	---
1982	---PPPPPP---	MANUAL	170 JUN 14	3 JUL 28	---	---	---	---	---
1983	---PPPPPP---	MANUAL	135 MAY 26	3 AUG 30	---	---	---	---	---
1984	---PP-PP---	MANUAL	37 MAY 30	3 MAY 02	---	---	---	---	---
1985	---PPPPPP---	MANUAL	83 MAY 24	3 OCT 28	---	---	---	---	---

MANUAL - MANUAL SAMPLING

C - COMPLETE MONTH

P - PARTIAL MONTH

* - EXTREME FOR PERIOD OF RECORD

JOSLYN CREEK NEAR FORT MACKAY - STATION NO. 07DAD15

INSTANTANEOUS SUSPENDED SEDIMENT FOR 1985

DATE	TIME	WATER TEMP.	INSTANT. DISCHARGE	SINGLE SAMPLING OF VERTICAL	TYPE OF SAMPLER	INSTANT. CONCENT.	DISSOLVED SOLIDS	PERCENT FINER THAN INDICATED SIZE, IN MILLIMETRES										PERCENT SAND	SILT	CLAY
[C]	[m ³ /s]	[m]	[mg/L]	[mg/L]				.002	.004	.008	.015	.031	.062	.125	.250	.500	1.00	2.00		
APR 29 15:40	5.0	11.9		10.5	X	DN48	2800	182	20	28	42	55	73	91	97	100			5	83
JUN 14 18:00	18.0	0.252		3.8	X	DN48	77	367												
JUN 14 18:01	18.0	0.252		3.8	X	DN48	88	385												
AUG 20 07:40	18.0	0.048		2.0	X	DN48	23	512												

NOTE : SINGLE VERTICAL LOCATED AT MID (MID STREAM) FOR 1985

VERTICAL SYMBOL(S): X - NOT AT REGULAR SINGLE SAMPLE VERTICAL

JOSLYN CREEK NEAR FORT MACKAY - STATION NO. 07DA016

HISTORICAL SEDIMENT DATA SUMMARY

YEAR	PERIOD OF OPERATION SUMMARY	TYPE OF SAMPLING	SAMPLED CONCENTRATION		SUSPENDED SEDIMENT LOAD		SUMMARY :		
			MAXIMUM	MINIMUM	MAXIMUM DAILY	TOTAL FOR PERIOD (TONNES)	MEAN LOAD (TONNES)	HISTORICAL MEAN LOAD (TONNES)	STANDARD ERROR OF MEAN %
			(JPMANJJASOND)	(mg/L)	(mg/L)	(TONNES)			
1975	--PP-PPP-P-	MANUAL	1 100 APR 15	37 NOV 04	---	---	---	---	---
1977	---PPPPPPP-	MANUAL	142 MAY 04	11 SEP 19	---	---	---	---	---
1978	---PPPPPPP-	MANUAL	2 380 MAY 01	13 AUG 22	---	---	---	---	---
1979	---PPPPPPP-	MANUAL	544 MAY 30	18 OCT 17	---	---	---	---	---
1980	---PPPPPPP-	MANUAL	118 APR 24	8 JUN 24 *	---	---	---	---	---
1981	---P-PP----	MANUAL	254 MAY 26	8 AUG 29	---	---	---	---	---
1982	---P-PP----	MANUAL	33 JUN 24	17 AUG 03	---	---	---	---	---
1983	---P-PP----	MANUAL	2 040 APR 28	17 SEP 14	---	---	---	---	---
1984	---P-PP----	MANUAL	154 MAY 22	48 SEP 22	---	---	---	---	---
1985	---P-P-P----	MANUAL	2 900 APR 28 *	23 AUG 20	---	---	---	---	---

MANUAL - MANUAL SAMPLING

P - PARTIAL MONTH

* - EXTREME FOR PERIOD OF RECORD

KEG RIVER AT HIGHWAY NO. 35 - STATION NO. 07HP002

INSTANTANEOUS SUSPENDED SEDIMENT FOR 1985

DATE	TIME	WATER TEMP.	INSTANT. DISCHARGE	SINGLE TYPE SAMPLING OF VERTICAL SAMPLER	INSTANT. CONCENT.	DISSOLVED SOLIDS	PERCENT FINER THAN INDICATED SIZE, IN MILLIMETRES										PERCENT SAND SILT CLAY				
							.002	.004	.008	.015	.031	.062	.125	.250	.500	1.00	2.00				
		(C)	(m ³ /s)	(m)	(mg/L)	(mg/L)															
MAY 07	11:05	8.0	21.8	MID X	DH59	1360	148	17	30	45	63	83	94	98	100				8	84	30
MAY 27	12:45	8.8	2.15	5.5 X	DIP	99	269														
JUN 21	11:20	18.0	0.898	4.4 X	DH48	35	321														
JUL 22	11:50	18.8	0.177	8.5 X	DH48	23	383														
AUG 19	10:40	18.8	0.511	4.8 X	DH48	25	308														
SEP 27	11:10	8.0	1.84	5.0 X	DH48	82	247														
NOV 01	11:30	0.5	0.825	B	5.0 X	DH48	35	250													

NOTE : SINGLE VERTICAL LOCATED AT MID (MID STREAM) FOR 1985

DISCHARGE SYMBOL(S): B - ICE CONDITIONS
VERTICAL SYMBOL(S): X - NOT AT REGULAR SINGLE SAMPLE VERTICAL

KEG RIVER AT HIGHWAY NO. 35 - STATION NO. 07HP002

HISTORICAL SEDIMENT DATA SUMMARY

YEAR	PERIOD OF OPERATION SUMMARY	TYPE OF SAMPLING	SAMPLED CONCENTRATION		SUSPENDED SEDIMENT LOAD		SUMMARY		
			MAXIMUM	MINIMUM	MAXIMUM DAILY	TOTAL FOR PERIOD (TONNES)	MEAN LOAD (TONNES)	HISTORICAL MEAN LOAD (TONNES)	STANDARD ERROR OF MEAN %
			(JFMAMJJASOND)	(mg/L)	(mg/L)	(TONNES)			
1974	-----PP--	MANUAL	24 SEP 19	17 OCT 31	--- --	---	---	---	---
1975	---PPPPPPP-	MANUAL	488 JUN 08	18 OCT 30	--- --	---	---	---	---
1976	---PPPPPPP-	MANUAL	1 040 JUN 29	21 SEP 30	--- --	---	---	---	---
1977	---PP-PP-	MANUAL	809 JUN 13	23 OCT 25	--- --	---	---	---	---
1978	---PPPP-P-	MANUAL	2 080 MAY 23	34 OCT 27	--- --	---	---	---	---
1979	---PPP-P-	MANUAL	3 580 JUN 28 *	18 NOV 02 *	--- --	---	---	---	---
1980	---PP-PP----	MANUAL	184 APR 25	27 JUL 03	--- --	---	---	---	---
1981	---PP-P----	MANUAL	738 MAY 04	27 JUN 28	--- --	---	---	---	---
1982	---P-P-P----	MANUAL	481 MAY 08	18 OCT 26	--- --	---	---	---	---
1983	---P-PPP----	MANUAL	111 MAY 08	40 AUG 11	--- --	---	---	---	---
1984	---PPPPPP-	MANUAL	1 270 MAY 22	48 AUG 27	--- --	---	---	---	---
1985	---PPPPP-P-	MANUAL	1 360 MAY 07	23 JUL 22	--- --	---	---	---	---

MANUAL - MANUAL SAMPLING

P - PARTIAL MONTH

* - EXTREME FOR PERIOD OF RECORD

ALBERTA

LESSER SLAVE RIVER AT HIGHWAY NO. 2A - STATION NO. 078K005

SUSPENDED SEDIMENT FOR 1988

LOCATION: LAT 55 17 39 N LONG 114 35 26 W
 DRAINAGE AREA: 14 400 km²
 TYPE OF FLOW: NATURAL
 TYPE OF GAUGE: RECORDING

TOTAL SUSPENDED SEDIMENT LOAD 82 700 TONNES FOR THE PERIOD MAR 26 TO OCT 31

REMARKS:

MAR				APR			MAY				
DAY	DAILY DISCHARGE (m ³ /s)	MEAN CON- CENTRATION (mg/L)	DAILY LOAD (t)	DAILY DISCHARGE (m ³ /s)	MEAN CON- CENTRATION (mg/L)	DAILY LOAD (t)	DAILY DISCHARGE (m ³ /s)	MEAN CON- CENTRATION (mg/L)	DAILY LOAD (t)	DAY	
1	26.1 8			29.8	23	69.2	66.4	64 S	263	1	
2	24.9 8			30.9	58 S	155	57.8	85 S	425	2	
3	24.7 8			31.0	46	121	64.0	283 S	1 400	3	
4	24.7 8			31.0	33	86.4	70.5	304 S	1 860	4	
5	24.5 8			31.4	31	84.1	66.9	136 S	788	5	
6	24.8 8			31.8	30	82.4	74.8	100 S	846	6	
7	24.8 8			31.7	28	76.7	74.5	75 S	483	7	
8	25.1 8			31.9	27	74.4	69.4	53	318	8	
9	25.3 8			33.3	26	76.9	64.5	61	340	9	
10	25.4 8			34.9	25 S	75.4	66.5	68	391	10	
11	25.0 8			36.4	27	84.9	69.0	52	310	11	
12	25.5 8			36.0	28	87.1	72.9	70	441	12	
13	25.8 8			37.1	30	96.2	72.2	71	443	13	
14	25.5 8			41.7	34	122	72.3	70	437	14	
15	25.1 8			43.9	38	144	72.8	70	440	15	
16	25.2 8			42.2	35 S	128	71.6	70	432	16	
17	26.4 8			42.7	35	129	71.4	70	432	17	
18	27.2 8			44.0	35	133	71.9	70	435	18	
19	27.8 8			44.7	35	126	70.1	70	424	19	
20	29.2 8			46.7	37	149	70.1	70	424	20	
21	30.1 8			47.8	37	153	69.2	72	430	21	
22	30.2 8			47.7	37	152	68.2	70 S	412	22	
23	30.5 8			48.6	37	155	68.0	87	394	23	
24	30.9 8			49.7	38 S	163	68.8	87	387	24	
25	30.7			50.3	40 S	174	68.4	85	373	25	
26	30.0	17 S	44.1	51.4	78 S	245	65.8	64	384	26	
27	28.4	17	43.2	54.5	82 S	288	65.3	63	385	27	
28	29.2	17	42.9	56.2	61 S	298	65.1	62 S	349	28	
29	28.2	17	42.9	56.1	62 S	301	65.7	69 S	335	29	
30	28.8	17	42.4	56.2	60 S	291	65.3	82 S	350	30	
31	28.1	18	46.3				65.5	71 S	402	31	
TOTAL	841.2		280.8	1 251.6		4 515.6	2 111.1		15 271	TOTAL	

JUN				JUL				AUG				DAY
DAY	DAILY DISCHARGE (m ³ /s)	MEAN CON-CENTRATION (mg/L)	DAILY LOAD (t)	DAILY DISCHARGE (m ³ /s)	MEAN CON-CENTRATION (mg/L)	DAILY LOAD (t)	DAILY DISCHARGE (m ³ /s)	MEAN CON-CENTRATION (mg/L)	DAILY LOAD (t)	DAY		
1	64.6	74	413	64.0	81	448	49.1	34 S	144	1		
2	64.5	76	418	63.8	87 S	480	50.1	44 S	190	2		
3	62.0	89	316	64.4	89 S	495	50.1	48	203	3		
4	61.0	53	279	62.2	66 S	355	50.7	60	253	4		
5	63.5	76	417	61.3	61 S	429	52.7	73 S	322	5		
6	66.2	97	555	61.5	61	430	51.7	61 S	272	6		
7	63.4	87	477	61.6	77	410	47.8	37 S	153	7		
8	63.3	82	448	59.6	88 S	350	47.5	41 S	158	8		
9	63.3	85	455	58.5	58 S	294	46.7	33 S	133	9		
10	62.8	84	456	57.8	66 S	328	46.7	30	121	10		
11	60.2	85	442	57.9	58 S	280	46.3	31	124	11		
12	60.4	88	459	59.2	74 S	379	47.7	37 S	152	12		
13	61.3	89	471	58.9	78	397	46.8	30 S	121	13		
14	60.5	89	465	57.3	70	347	44.3	22 S	84.2	14		
15	63.5	145	801	57.8	66	328	45.4	28 S	110	15		
16	72.5	195	1 230	56.9	56	275	45.3	24 S	83.9	16		
17	66.3	110 S	830	56.2	68 S	233	42.3	23	84.1	17		
18	62.5	83 S	340	55.8	66 S	270	41.8	25	90.3	18		
19	62.1	57 S	305	55.5	51 S	245	43.6	26 S	97.9	19		
20	62.0	97 S	520	54.0	46	215	45.1	31 S	121	20		
21	61.1	74 S	391	53.9	45	208	43.6	25 S	84.2	21		
22	61.1	81	322	55.9	77 S	371	42.4	23 S	84.3	22		
23	59.6	84	330	53.6	55 S	255	43.4	25 S	86.7	23		
24	61.2	79 S	418	53.6	42 S	195	41.8	35	126	24		
25	69.7	375 S	2 250	53.7	46 S	213	46.3	75	300	25		
26	66.3	182 S	928	57.3	109 S	540	52.6	72 S	327	26		
27	62.1	105 S	589	58.1	100	502	42.2	36 S	139	27		
28	64.7	87 S	495	53.7	58	269	39.2	23 S	77.9	28		
29	64.8	82	459	52.5	40 S	181	38.4	20 S	66.4	29		
30	64.2	82	455	51.1	30 S	132	40.7	34 S	120	30		
31				49.2	36 S	153	42.3	41	150	31		
TOTAL	1 900.7		16 526	1 776.1		10 007	1 414.5		4 840.9	TOTAL		

S - ICE CONDITIONS

S - SAMPLE(S) COLLECTED THIS DAY

ALBERTA

31

LESSER SLAVE RIVER AT HIGHWAY NO. 2A - STATION NO. 078K008

SUSPENDED SEDIMENT FOR 1985

SEP				OCT							
DAY	DAILY DISCHARGE (m ³ /s)	MEAN CON-CENTRATION (mg/L)	DAILY LOAD (t)	DAY	DAILY DISCHARGE (m ³ /s)	MEAN CON-CENTRATION (mg/L)	DAILY LOAD (t)	DAY	DAILY DISCHARGE (m ³ /s)	MEAN CON-CENTRATION (mg/L)	DAILY LOAD (t)
1	41.3	39	139	1	47.0	80 S	244	1			
2	40.3	36	125	2	45.4	82 S	208	2			
3	41.9	41 S	148	3	50.2	89 S	258	3			
4	39.2	31 S	109	4	48.8	82 S	281	4			
5	40.2	37 S	129	5	49.3	88	281	5			
6	40.8	40 S	141	6	47.8	83	289	6			
7	38.9	39	87.5	7	45.7	85	217	7			
8	38.4	25	82.9	8	44.1	49	187	8			
9	37.8	22 S	71.5	9	42.5	68 S	189	9			
10	38.7	22 S	87.9	10	48.0	81	269	10			
11	35.2	23 S	89.9	11	44.2	80	191	11			
12	35.5	23 S	70.5	12	50.7	83	278	12			
13	36.5	38	114	13	48.3	84	218	13			
14	42.2	57	209	14	44.2	49	187	14			
15	43.4	61	229	15	43.4	47	177	15			
16	44.7	70 S	270	16	43.0	45	187	16			
17	45.0	88 S	270	17	47.3	54	221	17			
18	41.4	48 S	172	18	47.4	58	229	18			
19	39.9	28 S	98.5	19	43.3	47	178	19			
20	39.4	27	81.9	20	45.1	50	195	20			
21	42.4	44 S	181	21	42.1	44	180	21			
22	50.8	71	312	22	43.9	47	178	22			
23	47.3	80	248	23	48.9	85	223	23			
24	49.0	84 S	271	24	48.7	87	240	24			
25	49.9	85 S	380	25	48.0	55	228	25			
26	51.7	88 S	304	26	45.8	48	190	26			
27	52.7	87 S	305	27	40.5	40	140	27			
28	47.8	52	214	28	45.5	48	189	28			
29	43.9	37	140	29	43.7	40 S	151	29			
30	44.8	38 S	112	30	40.7	47	185	30			
31				31	45.2	82 S	242	31			
TOTAL	1 278.4		5 042.8		1 413.7		5 426	TOTAL			

S - SAMPLE(S) COLLECTED THIS DAY

LESSER SLAVE RIVER AT HIGHWAY NO. 2A - STATION NO. 078K006

INSTANTANEOUS SUSPENDED SEDIMENT FOR 1985

DATE	TIME	WATER		INSTANT. DISCHARGE	SINGLE SAMPLING OF VERTICAL	TYPE OF SAMPLER	INSTANT. CONCENT.	DISSOLVED SOLIDS	PERCENT FINER THAN INDICATED SIZE, IN MILLIMETRES										PERCENT SAND SILT CLAY			
		TEMP.							.002	.004	.008	.016	.031	.062	.125	.250	.500	1.00	2.00			
		(C)	(m ³ /s)																			
MAR 26	12:00E	3.0	28.9	22.0	DH59		17	136														
APR 02	15:00	5.0	31.1	22.0	DH59		88 C															
APR 10	13:30	4.0	34.7	22.0	DH59		25	120														
APR 16	18:40	4.0	41.3	22.0	DH59		34 C															
APR 24	12:50	3.5	49.7	22.0	DH59		38 C	122														
APR 25	17:15	7.0	50.3	22.0	DH59		38 C															
APR 26	17:00	4.0	51.8	22.0	DH59		90 C															
APR 27	14:00	3.5	54.8	22.0	DH59		80															
APR 28	17:00	5.0	55.3	22.0	DH59		55															
APR 29	18:00	8.0	55.7	22.0	DH59		63															
APR 30	18:30	5.5	55.1	22.0	DH59		57 C															
MAY 01	16:00	5.5	55.5	22.0	DH59		51 C	103														
MAY 02	16:00	6.0	55.7	22.0	DH59		53 C															
MAY 03	16:00	4.5	55.6	22.0	DH59		285 C															
MAY 04	16:00	4.5	55.6	22.0	DH59		280 C															
MAY 05	16:00	5.5	55.9	22.0	DH59		101 C															
MAY 06	16:00	5.5	75.5	22.0	DH59		102 C															
MAY 07	16:00	5.0	74.7	22.0	DH59		88 C	88														
MAY 22	18:40	14.0	88.4	22.0	DH59		68 C															
MAY 28	17:00	13.5	85.2	22.0	DH59		82 C	120														
MAY 29	17:00	13.5	86.1	22.0	DH59		58 C															
MAY 30	17:00	14.2	85.3	22.0	DH59		62 C															
MAY 31	18:50	13.0	85.5	22.0	DH59		73 C	111														
JUN 17	18:45	14.5	85.2	22.0	DH59		93 C															
JUN 18	17:00	16.0	81.8	22.0	DH59		55 C															
JUN 19	17:00	16.0	82.6	22.0	DH59		52 C	127														
JUN 20	17:00	15.5	82.0	22.0	DH59		111 C															
JUN 21	16:00	16.0	80.8	22.0	DH59		64 C	129														
JUN 24	17:20	12.0	80.2	22.0	DH59		76 C															
JUN 26	17:00	15.0	85.1	22.0	DH59		434	111	16	19	33	45	55	90	98	100			10	71	19	
JUN 28	17:10	15.0	85.9	22.0	DH59		125 C	118														
JUN 29	17:00	16.0	81.2	22.0	DH59		99															
JUN 29	17:00	17.5	85.2	22.0	DH59		84	132														
JUL 02	17:00	18.3	84.8	22.0	DH59		91															
JUL 03	18:30	19.0	84.5	22.0	DH59		85															
JUL 04	17:00	20.0	82.2	22.0	DH59		59															
JUL 05	18:00	19.5	81.9	22.0	DH59		86															
JUL 08	17:00	19.5	59.5	22.0	DH59		87	143														
JUL 09	17:00	20.0	58.7	22.0	DH59		58															
JUL 10	17:00	20.5	57.2	22.0	DH59		58	138														
JUL 11	17:00	21.0	58.1	22.0	DH59		52															
JUL 12	17:00	19.8	59.7	22.0	DH59		82	140														
JUL 17	17:00	20.0	58.2	22.0	DH59		47															
JUL 18	17:00	19.3	56.4	22.0	DH59		59															
JUL 19	17:00	19.0	55.2	22.0	DH59		48	124														
JUL 22	17:00	20.0	57.6	22.0	DH59		94															
JUL 23	17:00	19.3	52.0	22.0	DH59		42	123														
JUL 24	17:00	18.5	54.7	22.0	DH59		45															
JUL 25	17:00	18.5	53.3	22.0	DH59		43															
JUL 26	17:00	18.5	50.2	22.0	DH59		128															
JUL 29	17:00	20.0	52.5	22.0	DH59		38	119														
JUL 30	17:00	20.5	50.5	22.0	DH59		27	118														
AUG 01	17:00	21.0	48.6	22.0	DH59		37															
AUG 02	17:00	20.5	49.0	22.0	DH59		34															
AUG 02	18:00	20.5	50.7	22.0	DH59		47															
AUG 05	17:00	19.0	53.3	22.0	DH59		75	113														
AUG 06	17:00	19.0	50.8	22.0	DH59		58															
AUG 07	17:00	17.5	47.5	22.0	DH59		33															
AUG 08	17:00	17.5	47.9	22.0	DH59		44															
AUG 09	17:00	17.0	46.2	22.0	DH59		30	112														
AUG 12	17:00	17.0	48.0	22.0	DH59		40	120														
AUG 13	17:00	15.5	46.4	22.0	DH59		28															
AUG 14	17:00	15.5	43.9	22.0	DH59		21															
AUG 15	17:00	15.5	46.4	22.0	DH59		30															
AUG 16	17:00	15.5	44.7	22.0	DH59		22	132														
AUG 18	17:00	15.5	44.8	22.0	DH59		28															
AUG 19	17:00	17.0	44.8	22.0	DH59		31															
AUG 20	17:00	15.5	45.3	22.0	DH59		23	130														
AUG 21	17:00	16.0	43.3	22.0	DH59		23															
AUG 22	17:00	15.5	42.0	22.0	DH59		25															
AUG 23	17:00	18.0	43.8	22.0	DH59		25															
AUG 26	17:00	14.5	49.9	22.0	DH59		63	129														
AUG 27	17:00	14.5	40.8	22.0	DH59		31															
AUG 28	14:15	14.5	38.8	22.0	DH59		22															
AUG 28	17:00	15.0	35.7	22.0	DH59		23															
AUG 29	17:00	15.5	37.8	22.0	DH59		18	126														
AUG 30	16:00	15.0	41.2	22.0	DH59		40															
SEP 03	17:00	14.0	43.5	22.0	DH59		46															
SEP 04	17:00	12.5	38.2	22.0	DH59		25															
SEP 05	17:00	12.5	40.5	22.0	DH59		40	124														
SEP 06	17:00	10.5	40.5	22.0	DH59		37															

LESSER SLAVE RIVER AT HIGHWAY NO. 2A - STATION NO. 078K008
HISTORICAL SEDIMENT DATA SUMMARY

YEAR	PERIOD OF OPERATION SUMMARY	TYPE OF SAMPLING	SAMPLED CONCENTRATION		SUSPENDED SEDIMENT LOAD		SUMMARY : APR-OCT		
			MAXIMUM	MINIMUM	MAXIMUM DAILY	TOTAL FOR PERIOD	MEAN LOAD (TONNES)	HISTORICAL MEAN LOAD (TONNES)	STANDARD ERROR OF MEAN %
			(JFMAMJJASOND)	(mg/L)	(mg/L)	(TONNES)			
1977	---PPPPPP--	MANUAL	155 APR 12	31 JUL 15	---	---	---	---	---
1978	---PP-P---	MANUAL	70 JUL 05	38 SEP 05	---	---	---	---	---
1980	---PPP-PPP--	MANUAL	77 APR 15	15 OCT 28	---	---	---	---	---
1981	---PCCCCC---	MANUAL	111 JUL 05	15 SEP 30	529 JUL 05	34 300	---	---	---
1982	---P-P---	MANUAL	39 AUG 05	23 AUG 31	---	---	180	180	---
1983	---PCCCCC---	MANUAL	284 JUN 25	14 MAY 08 *	4 070 JUN 25 *	38 800 *	---	---	---
1984	---PCCCCC---	MANUAL	523 JUN 8 *	15 MAR 22	4 030 JUN 08	72 500	---	---	---
1985	---PCCCCC---	MANUAL	434 JUN 25	17 MAR 28	2 280 JUN 25	52 700	282	225	29.2
MANUAL - MANUAL SAMPLING									
C - COMPLETE MONTH									

LITTLE PADDLE RIVER NEAR MAYERTHORPE - STATION NO. 078B005
INSTANTANEOUS SUSPENDED SEDIMENT FOR 1985

DATE	TIME	WATER TEMP. (C)	INSTANT. DISCHARGE (m³/s)	SINGLE VERTICAL SAMPLING OF VERTICAL SAMPLER (m)	TYPE OF SAMPLER	INSTANT. CONCENT. (mg/L)	DISSOLVED SOLIDS (mg/L)	PERCENT FINER THAN INDICATED SIZE, IN MILLIMETRES										PERCENT SAND	PERCENT SILT	PERCENT CLAY
								.002	.004	.008	.015	.031	.062	.125	.250	.500	1.00	2.00		
MAY 09	09:25	4.0	0.918	MID	DIP	46	215													
MAY 30	09:00	7.0	1.71	MID	DIP	42	263													
JUN 20	09:10	15.0	0.135	MID	DIP	15	272													
JUL 18	15:30		0.134	MID	DIP	19	255													
AUG 15	12:00	12.0	0.400	MID	DIP	59	253													
SEP 12	11:00	7.0	0.113	MID	DIP	14	283													
OCT 10	09:20	3.0	0.277	MID	DIP	18	258													

NOTE : SINGLE VERTICAL LOCATED AT 2.0 METRES FOR 1985

LITTLE PADDLE RIVER NEAR MAYERTHORPE - STATION NO. 078B005
HISTORICAL SEDIMENT DATA SUMMARY

YEAR	PERIOD OF OPERATION SUMMARY	TYPE OF SAMPLING	SAMPLED CONCENTRATION		SUSPENDED SEDIMENT LOAD		SUMMARY		
			MAXIMUM	MINIMUM	MAXIMUM DAILY	TOTAL FOR PERIOD	MEAN LOAD	HISTORICAL MEAN LOAD	STANDARD ERROR OF MEAN %
			(JFMAMJJASOND)	(mg/L)	(mg/L)	(TONNES)	(TONNES)	(TONNES)	(TONNES)
1974	-----PPPP--	MANUAL	94 JUL 14	11 SEP 25	---	---	---	---	---
1975	---PPPPPP---	MANUAL	154 APR 30	11 JUN 17	---	---	---	---	---
1976	---PPPPPP---	MANUAL	350 APR 13	8 AUG 10 *	---	---	---	---	---
1977	---PPP-PP---	MANUAL	434 MAY 30	14 JUN 22	---	---	---	---	---
1978	---PPPPPPPP---	MANUAL	1 080 JUN 15 *	17 OCT 30	---	---	---	---	---
1979	---PPPPPPPP---	MANUAL	595 APR 30	13 AUG 20	---	---	---	---	---
1980	---PPPPPPPP---	MANUAL	705 APR 15	21 OCT 14	---	---	---	---	---
1981	---PPPPPPPP---	MANUAL	35 MAY 18	10 JUL 05	---	---	---	---	---
1982	---PPPPPP---	MANUAL	513 JUL 05	19 AUG 31	---	---	---	---	---
1983	---P-----	MANUAL	185 JUN 28	185 JUN 28	---	---	---	---	---
1984	---P-----	MANUAL	512 JUN 05	512 JUN 05	---	---	---	---	---
1985	---PPPPPP---	MANUAL	49 AUG 15	14 SEP 12	---	---	---	---	---
MANUAL - MANUAL SAMPLING									
P - PARTIAL MONTH * - EXTREME FOR PERIOD OF RECORD									

MACKAY RIVER NEAR FORT MACKAY - STATION NO. 07DB001

INSTANTANEOUS SUSPENDED SEDIMENT FOR 1985

DATE	TIME	WATER TEMP. [C]	INSTANT. DISCHARGE [m ³ /s]	SINGLE SAMPLING VERTICAL SAMPLER [m]	TYPE OF SAMPLER	INSTANT. CONCENT. [mg/L]	DISSOLVED SOLIDS [mg/L]	PERCENT FINER THAN INDICATED SIZE, IN MILLIMETRES										PERCENT SAND SILT CLAY			
								.002	.004	.008	.016	.031	.062	.125	.250	.500	1.00	2.00	SAND	SILT	CLAY
APR 29	11:30	2.0	68.8	20.0	X DH48	280	188														
JUN 14	10:50	18.0	12.8	24.0	X DH48	14	202														
AUG 20	12:00	18.0	0.444	MID	X DH48	7	402														

NOTE : SINGLE VERTICAL IS UNDETERMINED FOR 1985

VERTICAL SYMBOL(S) : X - NOT AT REGULAR SINGLE SAMPLE VERTICAL

MACKAY RIVER NEAR FORT MACKAY - STATION NO. 07DB001

HISTORICAL SEDIMENT DATA SUMMARY

YEAR	PERIOD OF OPERATION	TYPE OF SAMPLING	SAMPLED CONCENTRATION		SUSPENDED SEDIMENT LOAD		SUMMARY :		
			MAXIMUM	MINIMUM	MAXIMUM DAILY	TOTAL FOR PERIOD	MEAN LOAD (TONNES)	HISTORICAL MEAN LOAD (TONNES)	STANDARD ERROR OF MEAN %
	(JFMAMJJASOND)		(mg/L)	(mg/L)	(TONNES)	(TONNES)			
1975	----PP--P--	MANUAL	353 JUL 20	27 OCT 08	---	---	---	---	---
1976	---PP-PP-P-	MANUAL	698 APR 10	7 AUG 08	---	---	---	---	---
1977	---PPPPPP--	MANUAL	157 APR 21	4 AUG 22	---	---	---	---	---
1979	---PPPPPP--	MANUAL	714 MAY 02 *	4 AUG 22	---	---	---	---	---
1980	---PPPPPP--	MANUAL	38 SEP 19	5 MAY 22	---	---	---	---	---
1981	---P-PP---	MANUAL	13 MAY 28	1 AUG 28 *	---	---	---	---	---
1982	---PP-PP---	MANUAL	92 MAY 24	2 SEP 16	---	---	---	---	---
1983	---P-PP---	MANUAL	108 APR 26	3 SEP 17	---	---	---	---	---
1984	---P-PP---	MANUAL	57 MAY 24	5 SEP 22	---	---	---	---	---
1985	---P-P-P---	MANUAL	280 APR 29	7 AUG 20	---	---	---	---	---

MANUAL - MANUAL SAMPLING

P - PARTIAL MONTH

* - EXTREME FOR PERIOD OF RECORD

MCLEOD RIVER ABOVE EMBARRAS RIVER - STATION NO. 07AF002

INSTANTANEOUS SUSPENDED SEDIMENT FOR 1985

DATE	TIME	WATER TEMP. [C]	INSTANT. DISCHARGE [m ³ /s]	SINGLE SAMPLING VERTICAL SAMPLER [m]	TYPE OF SAMPLER	INSTANT. CONCENT. [mg/L]	DISSOLVED SOLIDS [mg/L]	PERCENT FINER THAN INDICATED SIZE, IN MILLIMETRES										PERCENT SAND SILT CLAY		
								.002	.004	.008	.016	.031	.062	.125	.250	.500	1.00		2.00	
AUG 12	18:46	13.0	24.2	70.0	X DH48	5	188													
SEP 09	18:25	7.0	28.1	78.0	X DH48	3	181													
OCT 08	17:21	2.0	21.8	WERB	X DIP	4	180													

NOTE : SINGLE VERTICAL LOCATED AT MID (MID STREAM) FOR 1985

VERTICAL SYMBOL(S) : X - NOT AT REGULAR SINGLE SAMPLE VERTICAL

MCLEDD RIVER ABOVE EMBARRAS RIVER - STATION NO. 07AF002

HISTORICAL SEDIMENT DATA SUMMARY

YEAR	PERIOD OF OPERATION SUMMARY	TYPE OF SAMPLING	SAMPLED CONCENTRATION		SUSPENDED SEDIMENT LOAD		SUMMARY		
			MAXIMUM	MINIMUM	MAXIMUM DAILY	TOTAL FOR PERIOD	MEAN LOAD	HISTORICAL MEAN LOAD	STANDARD ERROR OF MEAN %
	(JFMAMJJASOND)		(mg/L)	(mg/L)	(TONNES)	(TONNES)	(TONNES)	(TONNES)	
1976	---PPPPPP---	MANUAL	19 AUG 25	3 SEP 22	---	---	---	---	---
1977	---PPPPPP---	MANUAL	30 JUN 22	7 JUL 20	---	---	---	---	---
1978	---PPPPPP---	MANUAL	106 JUN 05	3 AUG 23	---	---	---	---	---
1979	---PPPPPP---	MANUAL	85 MAY 15	0 AUG 15 *	---	---	---	---	---
1980	---PPPPPP---	MANUAL	552 JUN 03 *	11 MAY 05	---	---	---	---	---
1981	---PPPPPP---	MANUAL	113 MAY 11	3 JUL 08	---	---	---	---	---
1982	---PPPPPP---	MANUAL	200 MAY 04	5 OCT 27	---	---	---	---	---
1983	---PPPPPP---	MANUAL	25 MAY 10	1 SEP 20	---	---	---	---	---
1984	---PPPPPP---	MANUAL	38 SEP 24	5 AUG 21	---	---	---	---	---
1985	-----PPP--	MANUAL	8 AUG 12	3 SEP 09	---	---	---	---	---

MANUAL - MANUAL SAMPLING

P - PARTIAL MONTH

* - EXTREME FOR PERIOD OF RECORD

MCLEDD RIVER NEAR WHITECOURT - STATION NO. 07AG004

INSTANTANEOUS SUSPENDED SEDIMENT FOR 1985

DATE	TIME	WATER TEMP.	INSTANT. DISCHARGE	SINGLE TYPE SAMPLING OF VERTICAL SAMPLER	INSTANT. CONCENT.	DISSOLVED SOLIDS	PERCENT FINER THAN INDICATED SIZE, IN MILLIMETRES										PERCENT SAND	SILT	CLAY
							(mg/L)	(mg/L)	.002	.004	.008	.016	.031	.062	.125	.250	.500	1.00	2.00
JUN 18	14:00	20.0	39.3	10RB DIP	7	184													
JUL 18	15:30	20.0	28.2	10RB DIP	4	205													
AUG 13	15:00	15.0	49.5	10RB DIP	18	195													
SEP 10	15:00	8.0	57.0	10RB DIP	4	187													
OCT 08	14:00	3.0	52.8	10RB DIP	4	189													

NOTE: SINGLE VERTICAL IS UNDETERMINED FOR 1985

MCLEDD RIVER NEAR WHITECOURT - STATION NO. 07AG004

HISTORICAL SEDIMENT DATA SUMMARY

YEAR	PERIOD OF OPERATION SUMMARY	TYPE OF SAMPLING	SAMPLED CONCENTRATION		SUSPENDED SEDIMENT LOAD		SUMMARY		
			MAXIMUM	MINIMUM	MAXIMUM DAILY	TOTAL FOR PERIOD	MEAN LOAD	HISTORICAL MEAN LOAD	STANDARD ERROR OF MEAN %
	(JFMAMJJASOND)		(mg/L)	(mg/L)	(TONNES)	(TONNES)	(TONNES)	(TONNES)	
1976	---PPPPPP---	MANUAL	27 APR 21	3 SEP 22	180 APR 21 *	---	---	---	---
1977	---PPPPPP---	MANUAL	1 240 MAY 31	12 APR 20	---	---	---	---	---
1978	---PPPPPP---	MANUAL	878 JUN 16	3 AUG 29	---	---	---	---	---
1979	---PPPPPP---	MANUAL	287 MAY 01	0 AUG 22 *	---	---	---	---	---
1980	---PPPPPP---	MANUAL	1 850 JUN 07 *	5 OCT 15	---	---	---	---	---
1981	---PPPPPP---	MANUAL	32 MAY 19	3 SEP 08	---	---	---	---	---
1982	---PPPPPP---	MANUAL	1 470 JUL 07	5 JUN 23	---	---	---	---	---
1983	---PPPPPP---	MANUAL	115 JUL 05	3 AUG 31	---	---	---	---	---
1984	---PPPPPP---	MANUAL	300 MAY 03	54 JUL 24	---	---	---	---	---
1985	-----PPPP--	MANUAL	18 AUG 13	4 JUL 16	---	---	---	---	---

MANUAL - MANUAL SAMPLING

P - PARTIAL MONTH

* - EXTREME FOR PERIOD OF RECORD

MIDDLE FORK CREEK NEAR SEESE - STATION NO. 05BFO17

MONTHLY AND ANNUAL TOTAL VOLUMETRIC BED LOAD IN CUBIC METRES

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL	YEAR
1964	0	0	0	0	0	18.8	0	0	0	0	0	0	18.8	1964
1965	0	0	0	0	0	2.7	2.0	0	0	0	0	0	4.7	1965
1966	0	0	0	0	0.8	2.3	0.8	0	0	0	0	0	3.7	1966
1967	0	0	0	0	1.0	4.6	1.8	0	0	0	0	0	7.4	1967
1968	0	0	0	0	0.5	1.6	0.8	0.4	0.3	0.2	0	0	3.7	1968
1969	0	0	0	1.2	1.4	3.4	2.3	0.8	0.7	0	0	0	9.8	1969
1970	0	0	0	0	1.7	6.3	2.0	0	0	0	0	0	10.0	1970
1971	0	0	0	0	2.1	5.1	1.6	0	0	0	0	0	8.8	1971
1972	0	0	0	0	1.0	3.6	1.5	0	0	0	0	0	6.1	1972
1973	0	0	0	0	0	2.1	0	0	0	0	0	0	2.1	1973
1974	0	0	0	0	0	8.0	4.0	0	0	0	0	0	12.0	1974
1975	0	0	0	0	0	2.0	0	0	0	0	0	0	2.0	1975
1976	0	0	0	0	1.5	0.9	0	0	0	0	0	0	2.4	1976
1977	---	---	---	---	0.2	0.8	0	0	0	0	---	---	---	1977
1978	---	---	---	---	0.7	3.4	1.3	0.2	0	0	---	---	---	1978
MEAN	0	0	0	0.1	0.7	4.4	1.2	0.1	0.1	0	0	0	7.0	MEAN

BED LOAD MEASURED BY VOLUMETRIC METHOD. MONTHLY DISTRIBUTION ESTIMATED.

MIDDLE STREETER CREEK NEAR NANTON - STATION NO. 05AB023

MONTHLY AND ANNUAL TOTAL VOLUMETRIC BED LOAD IN CUBIC METRES

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL	YEAR
1965	0	0	0	0	0	0	0	0	0	0	0	0	0	1965
1966	0	0	0	0	0	0.1	0.1	0	0	0	0	0	0.2	1966
1967	0	0	0	0	0.2	0.1	0	0	0	0	0	0	0.3	1967
MEAN	0	0	0	0	0.1	0.1	0	0	0	0	0	0	0.2	MEAN

BED LOAD MEASURED BY VOLUMETRIC METHOD. MONTHLY DISTRIBUTION ESTIMATED.

MILK RIVER AT MILK RIVER - STATION NO. 11AA005

INSTANTANEOUS SUSPENDED SEDIMENT FOR 1985

DATE	TIME	WATER		INSTANT. DISCHARGE	SINGLE SAMPLING	TYPE OF SAMPLER	INSTANT. CONCENT.	DISSOLVED SOLIDS	PERCENT FINER THAN INDICATED SIZE, IN MILLIMETRES										PERCENT			
		TEMP.	DISCHARGE						(C)	(m ³ /s)	(mg/L)	(mg/L)	.002	.004	.008	.016	.031	.062	.125	.250	.500	1.00
MAR 28	07:30	0.0	5.00	12.0	X	DH48	205	240														
APR 03	16:02	2.0	23.3	31.0	X	DH48	1460	187	14	18	30	42	62	87	100							13 89 18
APR 23	11:35	6.5	19.5	20.0	X	DH48	289	144														
MAY 28	18:10	13.0	18.4	26.0	X	DH48	154	111														
JUN 25	17:45	15.0	18.8	21.0	X	DH48	117	108														
JUL 15	16:00	22.0	17.0	14.0	X	DH48	290	C 104														
JUL 29	17:20	19.0	16.9	10.0	X	DH48	130	78														
AUG 27	20:29	18.5	17.2	17.4	X	DH48	95	81														
OCT 01	10:25	5.0	2.72	18.0	X	DH48	9	232														
NOV 05	13:45	1.0	1.44	W		DH48	5	280														

NOTE: SINGLE VERTICAL LOCATED AT MID (MID STREAM) FOR 1985

DISCHARGE SYMBOL(S): W - DAILY MEAN; ICE CONDITIONS
 CONCENTRATION SYMBOL(S): C - COARSE MATERIAL PRESENT
 VERTICAL SYMBOL(S): X - NOT AT REGULAR SINGLE SAMPLE VERTICAL

ALBERTA

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MILK RIVER AT MILK RIVER - STATION NO. 11A8008

HISTORICAL SEDIMENT DATA SUMMARY

YEAR	PERIOD OF OPERATION SUMMARY	TYPE OF SAMPLING	SAMPLED CONCENTRATION		SUSPENDED SEDIMENT LOAD		SUMMARY : MAR-OCT		
			MAXIMUM	MINIMUM	MAXIMUM DAILY	TOTAL FOR PERIOD	MEAN LOAD	HISTORICAL MEAN LOAD	STANDARD ERROR OF MEAN %
			(mg/L)	(mg/L)	(TONNES)	(TONNES)	(TONNES)	(TONNES)	
(JFMAMJJASOND)									
1974	---PPPPPP--	MANUAL	552 MAY 08	3 OCT 19	---	---	---	---	---
1975	-PPPPPPPP--	MANUAL	5 130 JUN 21 *	8 APR 15	---	---	---	---	---
1976	--PPPPPPPP--	MANUAL	753 MAY 11	14 OCT 13	---	---	---	---	---
1981	--CCCCCCCCP-	MANUAL	831 MAR 11	7 NOV 02	3 890 MAY 17	90 500	389	389	---
1982	--CCCCCCCCP-	MANUAL	4 070 APR 14	2 SEP 03 *	39 400 APR 14 *	129 000 *	538	538	17.5
1983	-PPPPPPPP--	MANUAL	3 300 JUN 15	3 SEP 13	---	---	---	---	---
1984	-PPPP-P-P--	MANUAL	434 MAY 30	8 OCT 31	---	---	---	---	---
1985	-PPPPPP-PP-	MANUAL	1 480 APR 03	5 NOV 05	---	---	---	---	---

MANUAL - MANUAL SAMPLING

C - COMPLETE MONTH

P - PARTIAL MONTH

* - EXTREME FOR PERIOD OF RECORD

MUSKEG RIVER NEAR FORT MACKAY - STATION NO. 07DA008

INSTANTANEOUS SUSPENDED SEDIMENT FOR 1985

PERCENT FINER THAN INDICATED SIZE, IN MILLIMETRES																			
DATE	TIME	WATER TEMP. [C]	INSTANT. DISCHARGE [m ³ /s]	SINGLE VERTICAL SAMPLING OF VERTICAL SAMPLER [m]	TYPE OF SAMPLER	INSTANT. CONCENT. [mg/L]	DISSOLVED SOLIDS [mg/L]	PERCENT FINER THAN INDICATED SIZE, IN MILLIMETRES										PERCENT SAND SILT CLAY	
								.002	.004	.008	.015	.031	.062	.125	.250	.500	1.00		2.00
APR 30	10:35	4.0	20.1	17.0 X	DN59	20	134												
JUN 15	15:10	15.0	4.75	12.0 X	DN48	8	320												
AUG 21	07:30	13.0	0.255	7.0 X	DN48	8	321												

NOTE: SINGLE VERTICAL IS UNDETERMINED FOR 1985

VERTICAL SYMBOL(S): X - NOT AT REGULAR SINGLE SAMPLE VERTICAL

MUSKEG RIVER NEAR FORT MACKAY - STATION NO. 07DA008

HISTORICAL SEDIMENT DATA SUMMARY

YEAR	PERIOD OF OPERATION SUMMARY	TYPE OF SAMPLING	SAMPLED CONCENTRATION		SUSPENDED SEDIMENT LOAD		SUMMARY		
			MAXIMUM	MINIMUM	MAXIMUM DAILY	TOTAL FOR PERIOD	MEAN LOAD	HISTORICAL MEAN LOAD	STANDARD ERROR OF MEAN %
[JFMAMJJASOND]			(MG/L)	(MG/L)	(TONNES)	(TONNES)	(TONNES)	(TONNES)	
1976	--PP-PPP-P-	MANUAL	41 APR 11	3 AUG 03 *	---	---	---	---	---
1977	--PPPPPPPP--	MANUAL	28 APR 20	3 AUG 25	---	---	---	---	---
1978	--PPPPPPPP--	MANUAL	15 APR 24	3 JUN 28	---	---	---	---	---
1979	--PPPPPPPP--	MANUAL	13 MAY 02	5 MAY 30	---	---	---	---	---
1980	--PPPPPPPP--	MANUAL	18 APR 24	5 OCT 25	---	---	---	---	---
1981	--P-PP-PP--	MANUAL	8 JUL 15	3 MAY 27	---	---	---	---	---
1982	--PP-PP-PP--	MANUAL	8 MAY 19	4 JUN 25	---	---	---	---	---
1983	--P-P-PP-PP--	MANUAL	11 APR 27	3 AUG 07	---	---	---	---	---
1984	--P-P-PP-PP--	MANUAL	59 SEP 21 *	5 AUG 11	---	---	---	---	---
1985	--P-P-P-PP--	MANUAL	20 APR 30	5 AUG 21	---	---	---	---	---
MANUAL - MANUAL CONCENTRATION									

MANUAL - MANUAL SAMPLING

P - PARTIAL MONTH

* - EXTREME FOR PERIOD OF RECORD

ALBERTA

NORTH SASKATCHEWAN RIVER AT EDMONTON - STATION NO. 05DP001

INSTANTANEOUS SUSPENDED SEDIMENT FOR 1985

DATE	TIME	WATER TEMP.	INSTANT. DISCHARGE	SINGLE VERTICAL SAMPLING	TYPE OF SAMPLER	INSTANT. CONCENT.	DISSOLVED SOLIDS	PERCENT FINER THAN INDICATED SIZE, IN MILLIMETRES										PERCENT SAND SILT CLAY	
								.002	.004	.008	.015	.031	.063	.125	.250	.500	1.00	2.00	
		[C]	[m ³ /s]	[m]		[mg/L]	[mg/L]												
APR 07	11:00	1.0	267	MID	X DHS9	314	188												
MAY 01	13:00	10.0	217	MID	X DHS9	88	217												
MAY 31	13:00	18.0	147	MID	X DHS9	23	263												
AUG 08	11:15	21.0	148	MID	X DHS9	11	197												
AUG 27	12:00	14.0	182	MID	X DHS9	23	177												
SEP 23	13:10	8.0	212	MID	X DHS9	35	186												

NOTE : SINGLE VERTICAL LOCATED AT 189 METRES FOR 1985

VERTICAL SYMBOL(S): X - NOT AT REGULAR SINGLE SAMPLE VERTICAL

NORTH SASKATCHEWAN RIVER AT EDMONTON - STATION NO. 05DP001

HISTORICAL SEDIMENT DATA SUMMARY

YEAR	PERIOD OF OPERATION SUMMARY	TYPE OF SAMPLING	SAMPLED CONCENTRATION		SUSPENDED SEDIMENT LOAD		SUMMARY :		
			MAXIMUM [mg/L]	MINIMUM [mg/L]	MAXIMUM DAILY [TONNES]	TOTAL FOR PERIOD [TONNES]	MEAN LOAD [TONNES]	HISTORICAL MEAN LOAD [TONNES]	STANDARD ERROR OF MEAN %
1974	-----P-----	MANUAL	1 580 JUL 13	220 JUL 18	---	---	---	---	---
1975	---P-PPP---	MANUAL	97 MAY 18	3 SEP 23 *	---	---	---	---	---
1976	---P-PP-----	MANUAL	143 APR 09	34 JUL 22	---	---	---	---	---
1977	---PPP-P---	MANUAL	2 480 MAY 30 *	28 SEP 29	---	---	---	---	---
1978	---PPPPPP-P-	MANUAL	777 JUN 08	7 AUG 31	---	---	---	---	---
1979	---PPPPPP-P-	MANUAL	400 APR 27	7 AUG 23	---	---	---	---	---
1980	---PPPP---	MANUAL	142 JUN 02	28 SEP 28	---	---	---	---	---
1981	---PP-----	MANUAL	267 MAY 28	84 MAY 07	---	---	---	---	---
1982	---PPPPPP---	MANUAL	1 880 JUL 07	11 AUG 10	---	---	---	---	---
1983	---P-PPPP-P-	MANUAL	385 APR 28	8 AUG 31	---	---	---	---	---
1984	---PPPPPP-P-	MANUAL	251 JUN 13	6 OCT 03	---	---	---	---	---
1985	---PP-PP---	MANUAL	214 APR 07	11 AUG 08	---	---	---	---	---

MANUAL - MANUAL SAMPLING

P - PARTIAL MONTH

* - EXTREME FOR PERIOD OF RECORD

NORTH SASKATCHEWAN RIVER AT WHIRLPOOL POINT - STATION NO. 05DA000

INSTANTANEOUS SUSPENDED SEDIMENT FOR 1985

DATE	TIME	WATER TEMP. [C]	INSTANT. DISCHARGE [m ³ /s]	SINGLE VERTICAL [m]	TYPE OF SAMPLER	INSTANT. CONCENT. [mg/L]	DISSOLVED SOLIDS [mg/L]	PERCENT FINER THAN INDICATED SIZE, IN MILLIMETRES										PERCENT SAND SILT CLAY	
								.002	.004	.008	.015	.031	.063	.125	.250	.500	1.00		2.00
MAY 28	14:10	10.0	88.9	9.0	D49	39	128												
JUN 25	17:25	12.8	87.3	9.0	D49	18	130												
AUG 01	15:30	10.8	181	9.0	D49	154	83												
AUG 29	15:10	9.0	93.7	9.0	D49	45	106												
SEP 26	15:40	7.0	27.8	9.0	D49	13	148												

NOTE : SINGLE VERTICAL LOCATED AT 4.6 METRES FOR 1985

NORTH SASKATCHEWAN RIVER AT WHIRLPOOL POINT - STATION NO. OSDA009
HISTORICAL SEDIMENT DATA SUMMARY

YEAR	PERIOD OF OPERATION	TYPE OF SAMPLING	SAMPLED CONCENTRATION		SUSPENDED SEDIMENT LOAD			SUMMARY : APR-OCT		
	SUMMARY		MAXIMUM	MINIMUM	MAXIMUM DAILY		TOTAL FOR PERIOD	MEAN LOAD (TONNES)	HISTORICAL MEAN LOAD (TONNES)	STANDARD ERROR OF MEAN %
			(mg/L)	(mg/L)	(TONNES)		(TONNES)			
(JFMAMJJASOND)										
1972	---CCCCCCCC	DUAL	374 JUN 12	9 NOV 27	20 300 JUN 11	257 000	---	---	---	
1973	CCCCCCCCCCCC	DUAL	828 MAY 18 *	0 NOV 20 *	20 200 JUN 24	278 000	1 300	1 300	---	
1974	CCCCCCCCCCCC	DUAL	680 JUL 18	1 NOV 27	13 400 JUN 17	258 000	1 210	1 280	3.6	
1976	CCCCCCCCCCCC	DUAL	570 JUL 13	0 JAN 15	14 100 JUL 13	250 000	1 170	1 230	3.1	
1976	CCCCCCCCCCCC	DUAL	271 AUG 25	2 FEB 24	5 840 AUG 04	165 000	---	---	---	
1977	CCCCCCCCCCCC	MANUAL	808 JUN 08	1 NOV 15	10 000 JUN 08	137 000	837	1 080	13.9	
1978	CCCCCCCCCCCC	MANUAL	455 SEP 04	1 JAN 09	9 090 JUL 27	260 000	1 220	1 110	10.8	
1978	P---CCCCCCP-	MANUAL	803 JUN 01	2 JAN 15	10 300 MAY 27	228 000	1 070	1 100	8.9	
1980	---CCCCC---	MANUAL	794 JUL 23	5 SEP 27	15 100 JUL 23	209 000	---	---	---	
1981	---CCCCC---	MANUAL	437 JUL 29	5 MAY 05	10 800 JUL 29	257 000	---	---	---	
1982	---PPPPPP---	MANUAL	128 JUL 27	7 OCT 19	---	---	---	---	---	
1982	---PPPPPPPP---	MANUAL	241 MAY 31	2 OCT 18	---	---	---	---	---	
1984	---PPPPPP---	MANUAL	235 JUL 31	0 APR 30	---	---	---	---	---	
1985	---PP-PP---	MANUAL	154 AUG 01	13 SEP 26	---	---	---	---	---	
DUAL - MANUAL AND AUTOMATIC SAMPLING			MANUAL - MANUAL SAMPLING							
E - COMPLETE MONTH										

DUAL - MANUAL AND AUTOMATIC SAMPLING MANUAL - MANUAL SAMPLING

E - COMPLETE MONTH

P - PARTIAL MONTH

* - EXTREME FOR PERIOD OF RECORD

NOTIKIEWIN RIVER AT MANNING - STATION NO. 07HC001

INSTANTANEOUS SUSPENDED SEDIMENT FOR 1985

DATE	TIME	WATER	INSTANT.	SINGLE	TYPE	INSTANT.	DISSOLVED	PERCENT FINER THAN INDICATED SIZE, IN MILLIMETRES										PERCENT			
		DISCHARGE	DISCHARGE	SAMPLING		CONCENT.	SOLIDS	.002	.004	.008	.018	.031	.062	.125	.250	.500	1.00	2.00	SAND	SILT	CLAY
		(C)	(m ³ /s)	(m)			(mg/L)	(mg/L)													
MAY 08	10:42	8.0	78.4	26.0 X	DH89	830	146	23	29	48	60	79	85	91	98	100		15	56	29	
MAY 23	10:30	14.0	18.7	MID X	DH48	38	188														
JUN 19	10:14	19.0	3.38	MID X	DH48	4	197														
JUL 22	12:48	20.0	2.13	MID X	DH48	5	231														
AUG 27	09:30	13.0	1.30	22.0 X	DH48	3	178														
OCT 01	12:50	7.0	20.0	28.0 X	DH89	63	151														
OCT 29	10:25	2.0	8.68	32.0 X	DH89	14	190														

NOTE : SINGLE VERTICAL LOCATED AT MID (MID STREAM) FOR 1985

DISCHARGE SYMBOL(S):

VERTICAL SYMBOL(S):

B - ICE CONDITIONS

X - NOT AT REGULAR SINGLE SAMPLE VERTICAL

NOTIKIEWIN RIVER AT MANNING - STATION NO. 07HC001

HISTORICAL SEDIMENT DATA SUMMARY

YEAR	PERIOD OF OPERATION	TYPE OF SAMPLING	SAMPLED CONCENTRATION		SUSPENDED SEDIMENT LOAD		SUMMARY :		
	SUMMARY		MAXIMUM	MINIMUM	MAXIMUM DAILY	TOTAL FOR PERIOD	MEAN LOAD (TONNES)	HISTORICAL MEAN LOAD (TONNES)	STANDARD ERROR OF MEAN %
			(mg/L)	(mg/L)	(TONNES)	(TONNES)			
1974	-----P-P-	MANUAL	81 SEP 18	6 NOV 01	---	---	---	---	---
1975	-----P-P-	MANUAL	811 APR 28	4 AUG 11	---	---	---	---	---
1976	-----P-P-	MANUAL	820 JUN 29	13 OCT 01	---	---	---	---	---
1977	-----P-P-	MANUAL	291 APR 18	13 JUL 28	---	---	---	---	---
1978	-----P-P-	MANUAL	800 MAY 25	6 AUG 31	---	---	---	---	---
1978	-----P-P-	MANUAL	2 880 MAY 11	9 OCT 26	---	---	---	---	---
1980	-----P-P-	MANUAL	183 SEP 25	18 SEP 02	---	---	---	---	---
1981	-----P-P-	MANUAL	94 MAY 25	9 OCT 28	---	---	---	---	---
1982	-----P-P-	MANUAL	1 850 MAY 03	2 JUL 23	---	---	---	---	---
1983	-----P-P-	MANUAL	2 880 JUN 21	7 SEP 01	---	---	---	---	---
1984	-----P-P-	MANUAL	2 993 MAY 28	9 AUG 02	---	---	---	---	---
1985	-----P-P-	MANUAL	830 MAY 08	3 AUG 27	---	---	---	---	---
MANUAL - MANUAL SAMPLING									

MANUAL - MANUAL SAMPLING

P - PARTIAL MONTH

* - EXTREME FOR PERIOD OF RECORD

OLDMAN RIVER NEAR BROCKET - STATION NO. 05A024
SUSPENDED SEDIMENT FOR 1985

LOCATION: LAT 49 33 27 N LONG 113 49 20 W
DRAINAGE AREA: 4 400 km²
TYPE OF FLOW: NATURAL
TYPE OF GAUGE: RECORDING

TOTAL SUSPENDED SEDIMENT LOAD 29 600 TONNES FOR THE PERIOD APR 01 TO OCT 31

REMARKS:

APR				MAY				JUN			
DAY	DAILY DISCHARGE (m ³ /s)	MEAN CON-CENTRATION (mg/L)	DAILY LOAD (t)	DAILY DISCHARGE (m ³ /s)	MEAN CON-CENTRATION (mg/L)	DAILY LOAD (t)	DAILY DISCHARGE (m ³ /s)	MEAN CON-CENTRATION (mg/L)	DAILY LOAD (t)	DAY	
1	8.21 B	18	11.3	57.4	30.5	149	101	36.5	314	1	
2	10.8	24	22.0	63.4	53.5	290	100	28	242	2	
3	13.2	31	35.4	84.7	91	886	82.6	22.5	176	3	
4	11.8	23.5	23.4	108	122	1 140	84.8	15	110	4	
5	10.8	18	14.5	91.5	82	648	78.6	13	88.5	5	
6	10.3	15	13.3	74.8	38.5	246	76.7	11	72.9	6	
7	9.02	14	10.8	88.5	26	144	78.6	23	156	7	
8	8.85	14	10.7	83.8	23	127	141	63	787	8	
9	9.88	15	12.8	83.0	22	120	125	43	464	9	
10	12.9	32	35.7	82.5	20.5	108	103	33.5	294	10	
11	17.3	45	68.8	60.4	17	88.7	89.4	27	209	11	
12	21.3	58	103	54.8	15	71.2	81.7	21.5	148	12	
13	27.4	79	187	50.3	13	56.8	78.8	18	123	13	
14	43.8	104	394	50.2	10.5	43.4	78.0	16	105	14	
15	53.9	102.5	475	51.8	8	35.8	72.4	13	81.3	15	
16	44.8	88	333	55.8	11	54.0	70.7	12	73.3	16	
17	42.8	75	277	57.9	29	170	85.4	11.5	82.2	17	
18	42.2	54	197	81.7	51	380	59.8	11	56.8	18	
19	38.7	20.5	66.9	102	74	652	58.5	11	53.7	19	
20	34.6	12	35.8	117	87	981	57.4	16.5	79.3	20	
21	28.7	11	27.3	124	117.5	1 250	50.1	21	109	21	
22	25.9	11	24.8	128	123	1 260	53.1	14	64.2	22	
23	23.2	11	22.0	131	110.5	1 250	47.9	11	45.5	23	
24	21.7	10	18.7	132	98	1 130	43.6	9	33.9	24	
25	20.4	10	17.6	141	123.5	1 500	40.6	9	31.6	25	
26	19.5	10	16.9	143	96	1 190	38.2	6.5	19.8	26	
27	18.0	13	20.2	120	82.5	639	35.2	6	18.2	27	
28	24.9	44	84.7	103	43	343	33.8	6	17.5	28	
29	57.9	63.5	315	98.7	34	284	33.2	6	14.3	29	
30	59.9	44	228	95.7	34.5	281	32.8	7	19.9	30	
31				95.4	43	354				31	
TOTAL	772.48		3 112.7	2 738.4		15 871.8	2 108.0		4 049.9	TOTAL	

JUL				AUG				SEP			
DAY	DAILY DISCHARGE (m³/s)	MEAN CON-CENTRATION (mg/L)	DAILY LOAD (t)	DAILY DISCHARGE (m³/s)	MEAN CON-CENTRATION (mg/L)	DAILY LOAD (t)	DAILY DISCHARGE (m³/s)	MEAN CON-CENTRATION (mg/L)	DAILY LOAD (t)	DAY	
1	31.7	10	27.4	11.0	9	8.85	8.51	3	2.48	1	
2	29.8	10	26.7	11.4	10	8.85	10.2	3	2.84	2	
3	28.8	9	22.2	11.8	9	8.02	11.1	3	2.84	3	
4	27.3	9.5	21.2	11.1	8	7.87	11.0	2	1.80	4	
5	25.9	8	17.9	10.4	8	7.19	11.1	3	2.88	5	
6	24.7	8	17.1	10.1	8	8.88	14.4	17	21.2	6	
7	23.7	7	14.3	9.83	7	8.85	15.3	14	18.5	7	
8	22.8	7	13.8	10.2	9	7.83	14.0	14	18.9	8	
9	21.3	7	12.9	10.7	11	10.3	14.8	14	17.9	9	
10	20.0	6	10.4	11.0	10	9.50	15.0	16	22.1	10	
11	18.9	5	8.18	11.4	13	12.8	18.5	112	179	11	
12	18.0	5.5	7.78	11.3	12	11.7	38.1	387	1 210	12	
13	17.3	5	7.47	12.8	13	14.4	94.8	272.5	2 220	13	
14	17.4	10	15.0	12.4	11	11.8	74.7	94.5	349	14	
15	16.1	9	12.8	14.2	14	17.2	60.7	30	167	15	
16	15.8	8.5	10.7	22.4	22.5	42.8	80.5	24	105	16	
17	15.4	8	10.9	20.5	11	19.5	45.5	17	88.3	17	
18	17.5	10	15.1	18.9	8	8.80	48.4	26	105	18	
19	15.5	8	8.04	18.1	8	9.38	45.4	15.5	88.8	19	
20	14.7	5	6.35	17.5	5	7.60	41.4	11	39.3	20	
21	14.3	4	4.91	15.8	5	5.83	41.0	18	83.8	21	
22	13.7	5.5	5.83	15.0	4.5	5.53	44.4	33	127	22	
23	15.0	17	22.0	15.8	4	5.46	43.7	22	83.1	23	
24	14.9	19.5	24.5	14.8	4	5.11	42.0	9.5	32.7	24	
25	13.6	10	11.8	14.0	3	3.83	40.3	7.5	24.4	25	
26	12.7	6	6.58	13.5	3	3.50	39.6	7	24.0	26	
27	12.1	5	5.23	12.8	3.5	3.27	41.6	9	32.3	27	
28	11.8	4	4.08	11.3	3	2.83	39.6	6	20.8	28	
29	11.5	4	4.01	10.8	3	2.80	37.1	5	16.0	29	
30	11.3	3.5	2.93	10.3	2	1.78	35.9	5	15.5	30	
31	10.7	5.5	4.63	9.89	3.5	2.58				31	
TOTAL	593.8		381.28	411.72		283.02	1 052.51		5 040.08	TOTAL	

B - ICE CONDITIONS

S - SAMPLE(S) COLLECTED THIS DAY

GLOMAN RIVER NEAR BROCKET - STATION NO. 05A0024

SUSPENDED SEDIMENT FOR 1985

OCT												DAY
DAY	DAILY DISCHARGE (m ³ /s)	MEAN CON-CENTRATION (mg/L)	DAILY LOAD (t)		DAILY DISCHARGE (m ³ /s)	MEAN CON-CENTRATION (mg/L)	DAILY LOAD (t)		DAILY DISCHARGE (m ³ /s)	MEAN CON-CENTRATION (mg/L)	DAILY LOAD (t)	
1	34.6	4	12.0	"				"				1
2	34.2	4	11.8	"				"				2
3	33.6	4	11.6	"				"				3
4	31.5	4	10.9	"				"				4
5	29.8	4 S	10.2	"				"				5
6	31.2	5	13.5	"				"				6
7	31.0	5	13.4	"				"				7
8	27.7	6	9.57	"				"				8
9	25.6	3	8.51	"				"				9
10	28.1	4	9.02	"				"				10
11	27.4	4	9.47	"				"				11
12	28.5	5	12.3	"				"				12
13	27.1	4	9.37	"				"				13
14	25.4	4	9.12	"				"				14
15	28.6	11	27.2	"				"				15
16	40.9	24	84.8	"				"				16
17	49.3	21	89.4	"				"				17
18	48.8	14	56.4	"				"				18
19	43.5	10	37.8	"				"				19
20	44.5	9	34.6	"				"				20
21	45.5	8 S	32.1	"				"				21
22	45.9	6	23.8	"				"				22
23	45.9	6	23.8	"				"				23
24	42.9	8	22.2	"				"				24
25	49.5	22	94.1	"				"				25
26	62.6	21	114	"				"				26
27	57.4	11	54.6	"				"				27
28	50.9	12	52.1	"				"				28
29	51.2	11 S	55.2	"				"				29
30	55.2	8	38.8	"				"				30
31	52.7	6 S	27.3	"				"				31
TOTAL 1 249.9				"				"				TOTAL

S - SAMPLE(S) COLLECTED THIS DAY

OLDMAN RIVER NEAR BROCKET - STATION NO. 05A0024
INSTANTANEOUS SUSPENDED SEDIMENT FOR 1965

		WATER INSTANT.		SINGLE		TYPE		INSTANT. DISSOLVED		PERCENT FINER THAN INDICATED SIZE, IN MILLIMETRES										PERCENT						
DATE	TIME	TEMP.	DISCHARGE	SAMPLING	OF	CONCENT.	SOLIDS			.002	.004	.005	.015	.031	.063	.125	.250	.500	1.00	2.00	SAND	SILT	CLAY			
		[C]	[m ³ /s]	VERTICAL	SAMPLER	[mg/L]	[mg/L]																			
APR 04	10:15	2.0	11.3	20.0 X	DN48	23	197																			
APR 15	12:15	8.0	55.5		D49	102																				
APR 19	12:15	4.0	38.5		D49	18																				
APR 29	12:30	8.0	82.5		D49	84	176																			
MAY 01	18:30	11.0	80.4		D49	28																				
MAY 02	17:30	12.0	87.3		D49	81																				
MAY 06	11:00	7.0	75.9		D49	36	148																			
MAY 10	12:15	8.0	83.8		D49	20																				
MAY 14	17:00	12.0	82.2		D49	10	158																			
MAY 21	13:30	12.0	128		D49	118 C	133																			
MAY 23	20:00	18.0	120		D49	104																				
MAY 26	11:00	10.0	143		D49	125	120																			
MAY 27	12:30	10.0	118		D49	50																				
MAY 30	10:45	8.0	96.5		D49	27	136																			
MAY 30	10:45	8.0	96.5		D49	27	136																			
MAY 30	12:00	8.0	99.2		D49	31	159																			
MAY 30	12:01	9.0	99.2		D49	33	159																			
JUN 01	12:30	9.0	108		D49	36	136																			
JUN 03	20:00	12.0	99.9		D49	19																				
JUN 10	18:00	12.0	102		D49	33																				
JUN 12	11:00	12.0	82.9		D49	21	167																			
JUN 17	13:38	14.0	85.3		D49	11	145																			
JUN 20	10:30	14.0	56.8		D49	15																				
JUN 26	18:40	14.0	37.8		D49	7	153																			
JUN 26	18:41	14.0	37.8		D49	5	150																			
JUN 26	18:45	15.0	37.8		D49	6	155																			
JUN 26	18:45	15.0	37.8		D49	6	160																			
JUL 04	11:30	19.0	27.1		D49	9	185																			
JUL 12	11:35	18.0	18.1		D49	5																				
JUL 16	18:00	22.0	15.5		D49	4																				
JUL 22	12:30	20.0	13.7		D49	4	189																			
JUL 24	11:45	18.0	15.4		D49	18																				
JUL 30	12:05	18.0	11.8		D49	3	172																			
JUL 31	18:00	20.0	10.7		D49	6	168																			
AUG 16	20:00	14.0	25.0		D49	20	178																			
AUG 22	11:30	13.0	18.2		D49	4																				
AUG 27	11:30	15.0	13.0		D49	3	174																			
AUG 31	19:30	15.0	8.89		D49	3																				
SEP 13	10:15	8.0	101		D49	288	162	20	33	41	55	88	92	98	99	100						8	89	23		
SEP 13	11:30	8.0	99.2		D49	284	176	18	31	45	63	88	93	97	100						7	72	21			
SEP 14	12:15	9.0	73.5		D49	51																				
SEP 19	18:30	8.0	45.2		D49	14																				
SEP 24	12:30	7.0	42.2		D49	7	188																			
SEP 28	09:50	7.5	41.6		D49	7	175																			
OCT 05	12:15	8.0	28.4		D49	4	171																			
OCT 21	18:30	9.0	45.5		D49	7	165																			
OCT 28	12:00	4.0	61.2		D49	11	149																			
OCT 31	10:00	1.0	53.9		D49	8	161																			

NOTE: SINGLE VERTICAL LOCATED AT 48 METRES FOR 1965

CONCENTRATION SYMBOL(S): C - COARSE MATERIAL PRESENT
VERTICAL SYMBOL(S): X - NOT AT REGULAR SINGLE SAMPLE VERTICAL

OLDMAN RIVER NEAR BROCKET - STATION NO. 05A0024
HISTORICAL SEDIMENT DATA SUMMARY

YEAR	PERIOD OF OPERATION SUMMARY	TYPE OF SAMPLING	SAMPLED MAXIMUM	CONCENTRATION MINIMUM	SUSPENDED SEDIMENT LOAD MAXIMUM DAILY	TOTAL FOR PERIOD	SUMMARY: MAR-OCT MEAN LOAD	HISTORICAL MEAN LOAD	STANDARD ERROR OF MEAN %
	(JFMAMJJASOND)		[mg/L]	[mg/L]	(TONNES)	(TONNES)	(TONNES)	(TONNES)	
1966	-----	MANUAL	330 JUN 05	1 OCT 10	7 180 JUN 05	81 800	---	---	---
1967	-----	MANUAL	2 500 MAY 21	2 JAN 11	137 000 MAY 21	802 000	3 680	3 680	---
1968	-----	MANUAL	949 MAY 23	1 JAN 08	24 100 MAY 23	77 700	311	2 000	84.2
1969	-----	MANUAL	1 830 JUN 28	0 SEP 15 *	73 800 JUN 28	246 000	1 010	1 870	61.5
1970	-----	MANUAL	972 JUN 14	0 OCT 22	29 500 JUN 14	127 000	517	1 380	56.6
1971	-----	MANUAL	540 MAY 05	1 SEP 21	12 700 MAY 28	131 000	530	1 210	51.9
1972	-----	MANUAL	1 720 MAY 31	0 OCT 27	84 800 JUN 01	863 000	2 780	1 470	39.2
1973	-----	MANUAL	631 MAY 16	0 OCT 31	8 920 MAY 18	52 800	1 172	1 290	40.4
1974	-----	MANUAL	957 MAY 08	2 SEP 25	23 900 JUN 17	277 000	1 130	1 270	35.8
1975	-----	MANUAL	5 580 JUN 20 *	0 FEB 23	586 000 JUN 20 *	1 110 000 *	4 500	1 630	32.8
1976	-----	MANUAL	2 120 AUG 05	1 SEP 29	49 500 AUG 05	177 000	718	1 540	31.7
1977	-----	MANUAL	108 APR 07	3 JAN 05	283 APR 09	8 890	27.1	1 400	33.0
1978	-----	MANUAL	1 220 MAY 15	3 FEB 14	20 000 MAY 15	222 000	805	1 380	31.2
1979	-----	MANUAL	367 MAY 25	1 SEP 01	8 510 MAY 27	88 100	355	1 280	31.1
1980	-----	MANUAL	844 MAY 27	4 NOV 03	13 900 MAY 27	78 100	323	1 210	31.0
1981	-----	MANUAL	1 700 MAY 22	4 OCT 27	70 100 MAY 22	405 000	1 850	1 240	28.2
1982	-----	MANUAL	443 MAY 26	4 AUG 30	7 240 MAY 26	85 800	---	---	---
1983	-----	MANUAL	241 MAY 27	2 SEP 20	3 980 MAY 26	34 200	140	1 170	28.6
1984	-----	MANUAL	148 MAY 17	1 AUG 29	1 320 MAY 15	15 700	---	---	---
1985	-----	MANUAL	268 SEP 13	3 JUL 30	2 220 SEP 13	29 800	---	---	---

MANUAL - MANUAL SAMPLING

C - COMPLETE MONTH

P - PARTIAL MONTH

* - EXTREME FOR PERIOD OF RECORD

OLDMAN RIVER NEAR LETHBRIDGE - STATION NO. OSAD007

SUSPENDED SEDIMENT FOR 1985

LOCATION: LAT 49 42 30 N LONG 112 52 30 W
 DRAINAGE AREA: 17 000 km²
 TYPE OF FLOW: REGULATED SINCE 1910
 TYPE OF GAUGE: RECORDING

TOTAL SUSPENDED SEDIMENT LOAD 184 000 TONNES FOR THE PERIOD APR 01 TO OCT 31

REMARKS:

APR				MAY				JUN			
DAY	DAILY DISCHARGE (m³/s)	MEAN CON-CENTRATION (mg/L)	DAILY LOAD (t)	DAILY DISCHARGE (m³/s)	MEAN CON-CENTRATION (mg/L)	DAILY LOAD (t)	DAILY DISCHARGE (m³/s)	MEAN CON-CENTRATION (mg/L)	DAILY LOAD (t)	DAY	
1	18.5	22	37.1	37.1	178	574	177	208 S	3 180	1	
2	18.4	22 S	38.0	37.3	185	532	182	189 S	2 870	2	
3	20.3	23	40.3	40.9	179	633	178	181 S	2 780	3	
4	22.5	24 S	48.7	47.9	220	1 100	158	136 S	1 880	4	
5	24.0	32	88.4	87.8	318	2 400	138	104 S	1 220	5	
6	22.4	32	81.8	82.8	247 S	1 770	113	83 S	810	6	
7	20.4	27	47.8	58.8	76 S	482	81.4	57 S	450	7	
8	18.7	22	38.5	58.0	41 S	208	88.5	78	578	8	
9	17.1	17	28.1	51.2	37	184	135	183 S	2 180	9	
10	18.0	13 S	18.0	48.8	37 S	189	161	202 S	2 810	10	
11	18.6	15	21.5	55.0	88	322	185	178 S	2 380	11	
12	20.2	28	48.4	58.8	88 S	521	128	88 S	1 070	12	
13	25.7	44	97.7	68.8	84	485	113	88 S	884	13	
14	28.8	81	152	71.1	107 S	857	87.4	85 S	481	14	
15	38.4	78	288	79.3	273	1 870	88.3	39	223	15	
16	54.8	87 S	480	81.2	485 S	3 480	58.7	21 S	107	16	
17	47.2	88	381	82.5	493	3 510	57.1	18	88.8	17	
18	35.0	37 S	112	82.8	404 S	3 280	54.0	18 S	84.0	18	
19	30.1	35	81.0	110	384 S	3 480	80.8	20	105	19	
20	30.0	37	98.9	132	404 S	4 510	57.1	22 S	108	20	
21	27.3	28	88.4	154	587 S	7 840	50.8	20	87.8	21	
22	23.0	20	39.7	189	618 S	8 880	48.7	17 S	58.8	22	
23	17.8	15 S	23.2	182	814 S	9 580	40.7	15	52.7	23	
24	15.8	15	20.8	183	571 S	9 030	34.2	14	41.4	24	
25	14.8	18	20.5	181	578 S	8 580	29.4	12	30.5	25	
26	13.4	18	18.5	208	843 S	11 400	25.7	10	22.2	26	
27	12.1	18	18.7	214	828 S	11 800	22.5	8 S	15.8	27	
28	10.8	18	13.6	202	504 S	8 800	19.8	8	13.7	28	
29	9.02	14	10.8	182	403 S	8 890	17.7	7 S	10.7	29	
30	14.7	72 S	91.4	188	284 S	4 780	18.1	8	11.1	30	
31				178	288 S	4 400				31	
TOTAL	885.82		2 428.8	3 471.2		122 815	2 889.0		24 512.1	TOTAL	

JUL				AUG				SEP			
DAY	DAILY DISCHARGE (m ³ /s)	MEAN CON- CENTRATION (mg/L)	DAILY LOAD (t)	DAILY DISCHARGE (m ³ /s)	MEAN CON- CENTRATION (mg/L)	DAILY LOAD (t)	DAILY DISCHARGE (m ³ /s)	MEAN CON- CENTRATION (mg/L)	DAILY LOAD (t)	DAY	
1	15.0	8	10.4	3.08	12	3.20	3.17	5	1.37	1	
2	14.1	10	12.2	2.87	11	2.44	3.23	5	1.40	2	
3	12.3	13 S	13.8	2.89	10	2.24	3.45	5	1.48	3	
4	10.6	14	12.8	2.89	8 S	1.79	3.48 A	5	1.48	4	
5	8.39	18	12.2	2.38	5	1.23	4.87	5	2.52	5	
6	8.32	18	10.8	2.18	6	1.11	8.10 A	8	3.18	6	
7	7.24	18	8.38	2.12	5	0.82	8.89 A	8	3.87	7	
8	6.18	18	8.01	2.48	5	1.07	8.79 A	8 S	8.08	8	
9	5.71	18	7.40	2.48 A	5	1.28	8.38 A	7	6.07	9	
10	5.30	15	6.87	2.88	5	1.48	7.87	5	4.08	10	
11	3.80	14 S	4.80	3.22 A	7 S	1.88	7.12	8	4.82	11	
12	2.87	14	3.88	4.31	7	2.81	26.2	324	733	12	
13	3.11	14	3.78	4.89 A	8	3.24	31.1	884 S	1 870	13	
14	2.84	14	3.88	4.38 A	10	3.78	88.3	872 S	7 250	14	
15	2.48	14	2.88	8.13 A	11	7.73	77.0	389 S	2 380	15	
16	2.84	14	3.18	7.83 A	11	7.18	82.0	128 S	881	16	
17	2.88	14 S	3.87	8.88 A	10	7.40	82.8	88 S	313	17	
18	3.01	13	3.38	7.48	8 S	8.17	87.8	48	201	18	
19	2.78	12	2.88	7.64	8	5.28	88.0	38 S	148	19	
20	2.88	12	2.78	7.44	8	5.14	88.6	28	113	20	
21	2.45	11	2.33	8.78	10	8.48	42.8	28 S	82.7	21	
22	2.87	10	2.22	8.88	7	8.37	38.5	22	78.1	22	
23	3.06	10	2.84	7.78	7	4.71	43.5	20	78.2	23	
24	3.34	8	2.80	7.02	7 S	4.38	44.1	18	72.4	24	
25	2.82	8	2.27	5.89	8	2.80	41.8	25 S	80.5	25	
26	2.83	8	1.88	4.21	8	2.18	38.9	102 S	352	26	
27	3.18	8 S	2.20	3.83	5	1.52	37.6	103	335	27	
28	2.88	9	2.33	3.21	5	1.38	38.8	86	221	28	
29	2.82	11 S	2.78	3.11	4 S	1.07	38.8	41	137	29	
30	3.57	13	4.01	3.11	5	1.34	35.9	23	71.3	30	
31	3.43	13	3.85	3.13	5 S	1.35				31	
TOTAL	188.70		187.28	148.08		100.77	843.44		14 863.35	TOTAL	

A - MANUAL GAUGE

S - SAMPLE(S) COLLECTED THIS DAY

OLDMAN RIVER NEAR LETHBRIDGE - STATION NO. OSAD007

SUSPENDED SEDIMENT FOR 1985

OCT														
DAY	DAILY DISCHARGE (m ³ /s)	MEAN CON-CENTRATION (mg/L)	DAILY LOAD (t)		DAILY DISCHARGE (m ³ /s)	MEAN CON-CENTRATION (mg/L)	DAILY LOAD (t)		DAILY DISCHARGE (m ³ /s)	MEAN CON-CENTRATION (mg/L)	DAILY LOAD (t)		DAY	
1	34.8	13 S	38.8	*				*				*	1	
2	33.3	14	40.3	*				*				*	2	
3	32.5	14	39.3	*				*				*	3	
4	31.6	14	38.2	*				*				*	4	
5	31.2	14	37.7	*				*				*	5	
6				*				*				*	6	
8	31.5	14	38.1	*				*				*	8	
7	32.7	14	39.6	*				*				*	7	
8	34.8	15	45.2	*				*				*	8	
9	31.2	15 S	40.4	*				*				*	9	
10	29.7	15	38.5	*				*				*	10	
				*				*				*		
11	29.7	14	35.9	*				*				*	11	
12	35.4	14	42.8	*				*				*	12	
13	38.7	14	46.8	*				*				*	13	
14	39.0	14	47.2	*				*				*	14	
15	36.3	14 S	42.9	*				*				*	15	
				*				*				*		
16	38.3	17	63.3	*				*				*	16	
17	43.7	21	79.3	*				*				*	17	
18	63.2	25	115	*				*				*	18	
19	65.1	29	135	*				*				*	19	
20	67.6	33	164	*				*				*	20	
				*				*				*		
21	61.1	37	195	*				*				*	21	
22	63.8	40 S	220	*				*				*	22	
23	65.0	38	213	*				*				*	23	
24	65.5	32 S	181	*				*				*	24	
25	69.1	47	281	*				*				*	25	
				*				*				*		
26	82.5	80 S	719	*				*				*	26	
27	118	132	1 350	*				*				*	27	
28	121	188 S	2 070	*				*				*	28	
29	132	375 S	4 280	*				*				*	29	
30	139	377 S	4 830	*				*				*	30	
31	135	355	4 140	*				*				*	31	
				*				*				*		
TOTAL	1 809.9		19 341.3	*				*				*	TOTAL	

S - SAMPLE(S) COLLECTED THIS DAY

OLDMAN RIVER NEAR LETHBRIDGE - STATION NO. 05AD007

INSTANTANEOUS SUSPENDED SEDIMENT FOR 1985

DATE	TIME	WATER		INSTANT. DISCHARGE	SINGLE VERTICAL SAMPLING DEPTH	TYPE OF SAMPLER	INSTANT. CONCENT.	DISSOLVED SOLIDS	PERCENT FINER THAN INDICATED SIZE, IN MILLIMETRES										PERCENT SAND SILT CLAY																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																					
		(C)	(m ³ /s)						(m)	(mg/L)	(mg/L)	.002	.004	.008	.015	.031	.062	.125	.250	.500	1.00	2.00																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
APR 02	15:30	8.0	18.5		MID	X	DIP	22	262																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																															

NOTE: SINGLE VERTICAL LOCATED AT 137 METRES FOR 1985

TIME SYMBOL: E - ESTIMATED
 VERTICAL SYMBOL(S): X - NOT AT REGULAR SINGLE SAMPLE VERTICAL

OLDMAN RIVER NEAR LETHBRIDGE - STATION NO. 05AD007

HISTORICAL SEDIMENT DATA SUMMARY

YEAR	PERIOD OF OPERATION SUMMARY	TYPE OF SAMPLING	SAMPLED CONCENTRATION		SUSPENDED SEDIMENT LOAD			SUMMARY : MAR-OCT		
			MAXIMUM	MINIMUM	MAXIMUM DAILY	TOTAL FOR PERIOD		MEAN LOAD	HISTORICAL MEAN LOAD	STANDARD ERROR OF MEAN %
			(mg/L)	(mg/L)	(TONNES)	(TONNES)		(TONNES)	(TONNES)	
1972	--CCCCCCCCC	DUAL	2 310 JUN 02	5 NOV 06	173 000 JUN 02	3 180 000		13 000	13 000	--
1973	CCCCCCCCCCC	DUAL	750 MAY 19	2 JAN 08 *	19 700 MAY 20	188 000		841	8 820	90.6
1974	CCCCCCCCCCC	DUAL	1 750 JUN 18	4 OCT 02	103 000 JUN 18	1 710 000		8 970	8 870	51.9
1975	CCCCCCCCCCC	DUAL	7 880 JUN 21 *	4 AUG 28	1 880 000 JUN 21 *	8 780 000 *		23 500	11 000	44.2
1976	CCCCCCCCCCC	MANUAL	1 380 MAY 11	3 SEP 23	90 100 AUG 07	738 000		2 880	8 420	43.5
1977	CCCCCCCCCCC	MANUAL	108 JUN 13	3 JAN 06	418 JUN 11	11 500		40.8	7 880	47.0
1978	CCCCCCCCCCC	MANUAL	3 840 MAY 18	5 JAN 24	112 000 MAY 18	1 340 000		5 480	7 510	41.8
1979	CCCCCCCCC--	MANUAL	2 290 MAY 28	8 AUG 01	103 000 MAY 28	944 000		3 850	7 080	39.0
1980	--CCCCCCCCP-	MANUAL	8 980 MAY 27	7 AUG 27	418 000 MAY 27	1 010 000		4 100	8 730	38.5
1981	--CCCCCCCCC-	MANUAL	4 870 MAY 23	5 SEP 07	488 000 MAY 23	2 480 000		10 100	7 080	31.4
1982	--CCCCCCCCP-	MANUAL	1 430 MAY 28	4 MAR 08	33 900 MAY 28	508 000		2 070	8 810	31.1
1983	--CCCCCCCCC-	MANUAL	873 MAY 28	6 APR 12	22 400 MAY 28	134 000		548	8 100	31.9
1984	--CCCCCCCCP-	MANUAL	304 JUN 01	8 APR 01	2 250 JUN 01	24 200		99.3	8 840	32.8
1985	--CCCCCCCC-	MANUAL	1 170 SEP 14	4 AUG 28	11 800 MAY 27	184 000		--	--	--

DUAL - MANUAL AND AUTOMATIC SAMPLING MANUAL - MANUAL SAMPLING

C - COMPLETE MONTH P - PARTIAL MONTH * - EXTREME FOR PERIOD OF RECORD

OLDMAN RIVER NEAR WALDRON'S CORNER - STATION NO. 05AA023

SUSPENDED SEDIMENT FOR 1985

LOCATION: LAT 49 48 50 N LONG 114 11 00 W
 DRAINAGE AREA: 1 840 km²
 TYPE OF FLOW: NATURAL
 TYPE OF GAUGE: RECORDING

TOTAL SUSPENDED SEDIMENT LOAD 3 130 TONNES FOR THE PERIOD APR 01 TO OCT 31

REMARKS:

APR			MAY			JUN			DAY
DAY	DAILY DISCHARGE (m ³ /s)	MEAN CONCENTRATION (mg/L)	DAILY LOAD (t)	DAILY DISCHARGE (m ³ /s)	MEAN CONCENTRATION (mg/L)	DAILY LOAD (t)	DAILY DISCHARGE (m ³ /s)	MEAN CONCENTRATION (mg/L)	
1	2.22 B	5	0.98	12.1	12 S	12.5	35.5	25 S	78.7
2	2.30 B	5	0.99	18.1	14	19.5	35.8	18 S	55.7
3	2.40 B	5	1.04	23.4	20 S	40.4	33.0	13 S	37.1
4	2.51 B	5	1.08	28.4	13 S	29.7	30.4	11 S	28.9
5	2.62 B	5	1.13	19.8	9	15.2	28.7	10	24.8
6	2.75 B	5	1.19	15.4	9	12.6	28.7	8 S	19.5
7	2.90 B	5	1.25	16.3	9 S	12.7	31.3	42	114
8	3.05 B	5	1.32	16.7	7	10.1	57.0	124 S	611
9	3.23 B	5	1.40	16.8	5 S	7.13	40.1	35 S	121
10	4.00 B	5	1.73	16.2	5	7.00	32.9	17 S	48.3
11	5.00 B	5	2.18	14.8	4 S	5.11	28.7	12 S	28.8
12	5.77	5	2.49	13.0	4	4.49	28.7	12	30.0
13	6.62	5	3.88	12.0	4 S	4.15	25.4	19 S	41.7
14	14.5	5	8.31	13.3	4	4.80	23.8	16	32.8
15	11.2	5	4.84	13.4	5 S	5.79	22.7	9 S	17.7
16	8.58	5	3.70	15.3	7	9.25	21.5	7	13.0
17	8.37	5 S	4.05	18.7	9 S	14.5	19.5	8 S	10.1
18	8.81	4	3.04	23.1	11	22.0	17.8	5	7.73
19	7.89	4 S	2.73	29.5	14	35.7	17.1	5 S	7.39
20	5.54	3	1.70	30.5	20 S	52.7	17.7	4	8.12
21	5.74	2 S	0.99	31.1	23	61.8	17.5	4 S	8.08
22	6.09	2	0.88	31.7	19 S	52.0	15.4	4	5.32
23	5.28	2 S	0.91	32.7	17	48.0	18.2	4	4.81
24	4.78	4	1.65	32.8	25 S	70.8	13.1	4 S	4.83
25	4.60	8	3.18	38.8	44 S	139	12.1	5	5.23
26	4.17	17 S	5.12	38.7	53 S	188	11.2	6 S	5.81
27	4.44	20	7.87	30.4	20 S	52.8	10.4	7	5.28
28	7.48	23	14.9	27.5	11	25.1	9.88	8	8.80
29	13.3	18 S	20.7	26.9	8 S	15.5	9.55	9	7.80
30	11.4	14	13.8	31.1	9	24.2	9.48	10 S	8.20
31				32.3	15 S	41.8			
TOTAL	180.47		117.58	713.0		1 028.22	695.52		1 393.21

JUL			AUG			SEP			DAY
DAY	DAILY DISCHARGE (m ³ /s)	MEAN CONCENTRATION (mg/L)	DAILY LOAD (t)	DAILY DISCHARGE (m ³ /s)	MEAN CONCENTRATION (mg/L)	DAILY LOAD (t)	DAILY DISCHARGE (m ³ /s)	MEAN CONCENTRATION (mg/L)	
1	9.08	7	5.48	4.28	1	0.37	3.87	2	0.67
2	8.55	4 S	3.95	4.28	1	0.37	4.16	2	0.72
3	8.21	3	2.13	4.57	1	0.39	4.21	2	0.73
4	7.94	3	2.06	4.37	2	0.78	4.28	2	0.74
5	7.85	3	1.88	4.19	2	0.72	4.22	2	0.73
6	7.32	3	1.80	4.18	3	0.72	5.23	2	0.90
7	7.07	3	1.83	4.08	2	0.71	4.85	2	0.84
8	6.77	3	1.75	4.08	2	0.70	4.61	2	0.80
9	6.62	3	1.89	4.48	2	0.77	4.62	2	0.80
10	6.33	3	1.84	4.26	2	0.74	4.78	3	1.24
11	6.18	3	1.80	4.26	2	0.73	6.80	5	2.42
12	6.01	3	1.58	4.38	2	0.78	20.0	47	81.2
13	5.87	2	1.03	4.48	2	0.77	38.8	58 S	179
14	5.93	2	1.02	4.15	2	0.72	24.4	22 S	46.4
15	5.87	2	0.98	4.79	2	0.83	18.6	11 S	17.9
16	5.71	2	0.99	5.57	5 S	2.84	15.8	8	12.1
17	6.41	2	1.11	5.80	7	3.38	14.5	8	10.0
18	6.71	2	1.18	5.13	19 S	8.42	14.0	8	9.88
19	6.72	2	0.98	4.82	12	5.00	12.8	7	7.80
20	5.45	2	0.94	4.64	5	2.00	11.7	8	8.07
21	5.24	2	0.81	4.75	5	2.05	12.3	8	5.31
22	5.05	2 S	0.87	5.12	4	1.77	12.5	4	4.32
23	5.17	2	0.89	4.65	4	1.88	12.0	4	4.15
24	5.06	2	0.87	4.60	4	1.59	11.3	3	2.93
25	4.87	2	0.84	4.43	3	1.15	11.0	2 S	1.90
26	4.89	2	0.81	4.28	3	1.11	11.1	2	1.92
27	4.58	1	0.40	4.24	3	1.10	11.4	2	1.97
28	4.51	1	0.39	4.19	2	0.72	10.0	2	1.73
29	4.45	1	0.38	4.09	2 S	0.71	9.80	2	1.71
30	4.41	1 S	0.38	3.97	2	0.69	8.95	2	1.72
31	4.36	1	0.38	3.90	2	0.67			
TOTAL	187.55		41.91	139.88		44.95	329.60		408.40

B - ICE CONDITIONS

S - SAMPLE(S) COLLECTED THIS DAY

OLDMAN RIVER NEAR WALDRON'S CORNER - STATION NO. 05AA023

SUSPENDED SEDIMENT FOR 1985

OCT															
DAY	DAILY DISCHARGE (m ³ /s)	MEAN CON- CENTRATION (mg/L)	DAILY LOAD (t)		DAILY DISCHARGE (m ³ /s)	MEAN CON- CENTRATION (mg/L)	DAILY LOAD (t)		DAILY DISCHARGE (m ³ /s)	MEAN CON- CENTRATION (mg/L)	DAILY LOAD (t)		DAILY DISCHARGE (m ³ /s)	MEAN CON- CENTRATION (mg/L)	DAILY LOAD (t)
1	9.85	2	1.87	*				*				*			1
2	9.30	2	1.81	*				*				*			2
3	9.15	2	1.84	*				*				*			3
4	8.43	2	1.48	*				*				*			4
5	8.44	2	1.48	*				*				*			5
6	8.79	2	1.52	*				*				*			6
7	7.48	3	1.94	*				*				*			7
8	7.89	3	1.99	*				*				*			8
9	6.91	3	1.79	*				*				*			9
10	8.08	3	2.09	*				*				*			10
11	8.04	3	2.08	*				*				*			11
12	7.78	3	2.01	*				*				*			12
13	7.34	3	1.90	*				*				*			13
14	7.18	3	1.88	*				*				*			14
15	7.51	3	1.95	*				*				*			15
16	9.31	3	2.41	*				*				*			16
17	10.9	3	2.83	*				*				*			17
18	9.99	3	2.59	*				*				*			18
19	9.51	3	2.48	*				*				*			19
20	10.5	3	2.72	*				*				*			20
21	10.7	3	2.77	*				*				*			21
22	10.9	3	2.83	*				*				*			22
23	10.5	4	3.83	*				*				*			23
24	9.77	3	2.53	*				*				*			24
25	11.1	5	4.80	*				*				*			25
26	10.7	7	6.47	*				*				*			26
27	11.2	8	7.74	*				*				*			27
28	14.4	10	12.4	*				*				*			28
29	12.5	8	8.84	*				*				*			29
30	11.7	4 S	4.04	*				*				*			30
31	10.7	4	3.70	*				*				*			31
TOTAL	298.11		89.47	*				*				*			TOTAL

S - SAMPLE(S) COLLECTED THIS DAY

OLDMAN RIVER NEAR WALDRON'S CORNER - STATION NO. 05AA023

INSTANTANEOUS SUSPENDED SEDIMENT FOR 1985

DATE	TIME	WATER	INSTANT.	SINGLE	TYPE	INSTANT.	DISSOLVED	PERCENT FINER THAN INDICATED SIZE, IN MILLIMETRES										PERCENT						
		TEMP.	DISCHARGE	SAMPLING		CONCENT.	SOLIDS	.002	.004	.008	.016	.031	.062	.125	.250	.500	1.00	2.00	SAND	SILT	CLAY			
		(C)	(m ³ /s)	VERTICAL	OF	(mg/L)	(mg/L)																	
					SAMPLER																			
					(m)																			
APR	17	13:00	4.6	9.28	WERB	DHS9	5	180																
APR	18	10:45	2.0	7.88	WERB	DHS9	4																	
APR	21	11:30	3.0	5.84	WERB	DHS9	2																	
APR	23	18:00	5.5	4.44	WERB	DHS9	2																	
APR	25	10:30	4.0	4.41	WERB	DHS9	17	219																
APR	26	10:31	4.0	4.41	WERB	DHS9	70 A	212																
APR	29	17:00	7.0	12.2	WERB	DHS9	18																	
MAY	01	13:15	7.0	12.1	WERB	DHS9	11																	
MAY	03	15:30	8.0	22.2	WERB	DHS9	22																	
MAY	04	14:45	7.0	25.5	WERB	DHS9	11	149																
MAY	04	14:45	7.0	25.5	WERB	DHS9	8	148																
MAY	07	10:00	5.8	18.9	WERB	DHS9	5																	
MAY	09	18:00	9.0	15.5	WERB	DHS9	9																	
MAY	11	15:30	8.0	14.3	WERB	DHS9	4																	
MAY	13	18:15	9.0	11.5	WERB	DHS9	4																	
MAY	15	15:30	10.0	13.3	WERB	DHS9	5	189																
MAY	17	15:30	10.0	18.2	WERB	DHS9	9																	
MAY	20	21:00	12.0	28.0	WERB	DHS9	93 A	145																
MAY	20	21:01	12.0	28.0	WERB	DHS9	24	139																
MAY	22	20:00	11.0	30.1	WERB	DHS9	17																	
MAY	24	14:00	7.5	32.0	WERB	DHS9	25																	
MAY	25	11:30	9.0	37.1	WERB	DHS9	43	126																
MAY	26	21:00	7.0	33.4	WERB	DHS9	51																	
MAY	27	12:30	8.0	30.6	WERB	DHS9	15																	
MAY	28	20:00	7.0	26.8	WERB	DHS9	8	143																
MAY	31	12:00	8.5	31.9	WERB	DHS9	14																	
JUN	01	10:00	5.0	35.7	WERB	DHS9	26																	
JUN	02	15:00	7.0	35.4	WERB	DHS9	16																	
JUN	03	20:00	9.0	31.9	WERB	DHS9	12																	
JUN	04	13:30	7.0	30.2	WERB	DHS9	11	144																
JUN	05	18:30	10.0	25.8	WERB	DHS9	7																	
JUN	08	15:30	8.0	51.4	WERB	DHS9	104	138																
JUN	09	12:00	8.0	40.0	WERB	DHS9	32																	
JUN	10	18:00	8.0	31.6	WERB	DHS9	15	139																
JUN	11	18:00	11.0	27.6	WERB	DHS9	11																	
JUN	13	18:00	12.0	25.1	WERB	DHS9	21																	
JUN	15	17:30	13.0	22.1	WERB	DHS9	8																	
JUN	17	15:00	12.0	19.4	WERB	DHS9	6	188																
JUN	19	11:00	12.0	17.5	WERB	DHS9	5																	
JUN	21	14:30	10.0	17.2	WERB	DHS9	4																	
JUN	24	15:00	9.0	13.3	WERB	DHS9	4																	
JUN	26	14:00	12.0	11.3	WERB	DHS9	8																	
JUN	30	11:00	14.0	9.88	WERB	DHS9	10																	
JUL	02	19:00	17.0	8.53	WERB	DHS9	3	157																
JUL	22	11:00	18.5	5.03	WERB	DHS9	2																	
JUL	30	14:00	18.0	4.39	WERB	DHS9	1	185																
AUG	18	14:00	9.5	6.46	WERB	DHS9	5																	
AUG	18	14:30	16.0	5.18	WERB	DHS9	22	180																
AUG	28	11:40	13.0	4.08	WERB	DHS9	2																	
SEP	13	14:30	7.0	32.8	WERB	DHS9	53	134																
SEP	14	10:00	5.5	25.0	WERB	DHS9	21																	
SEP	15	11:00	5.0	18.9	WERB	DHS9	10																	
SEP	25	13:00	7.0	11.2	WERB	DHS9	2	189																
OCT	30	10:20	1.0	11.1	WERB	DHS9	4	163																

NOTE : SINGLE VERTICAL LOCATED AT 4 METRES FOR 1985

CONCENTRATION SYMBOL(S) : A - CLASSIFIED AS AN ANOMALY

OLDMAN RIVER NEAR WALDRON'S CORNER - STATION NO. 05AA023

HISTORICAL SEDIMENT DATA SUMMARY

YEAR	PERIOD OF OPERATION SUMMARY	TYPE OF SAMPLING	SAMPLED CONCENTRATION		SUSPENDED SEDIMENT LOAD		SUMMARY : MAR-OCT			
			MAXIMUM	MINIMUM	MAXIMUM DAILY	TOTAL FOR PERIOD	MEAN LOAD (TONNES)	HISTORICAL MEAN LOAD (TONNES)	STANDARD ERROR OF MEAN %	
			(mg/L)	(mg/L)	(TONNES)	(TONNES)				
(JFMAMJJASOND)										
1975	---PPPPPP--	MANUAL	2 520 JUN 21 *	1 AUG 12	---	---	---	---	---	---
1976	---CCCCCCCC	MANUAL	185 AUG 09	0 OCT 28 *	16 100	AUG 08 *	35 500	---	---	---
1977	CCCCCCCCCCCC	MANUAL	51 APR 06	0 JAN 05	98.6	MAY 11	1 360	5.40	5.40	---
1978	CCCCCCCCCCCC	MANUAL	220 MAR 30	1 DEC 11	887	MAY 22	17 000	89.1	37.3	85.4
1979	CCCCCCCCCCCC	MANUAL	136 MAY 27	0 JUL 17	1 100	MAY 27	7 610	30.9	35.1	52.7
1980	--CCCCCCCCP	MANUAL	103 MAY 26	0 APR 02	577	APR 26	8 270	28.6	32.6	40.6
1981	---CCCCCCCC--	MANUAL	706 MAY 26	1 OCT 14	11 100	MAY 26	63 400 *	259	78.0	89.5
1982	---PCCCCC---	MANUAL	43 MAY 26	1 JUL 26	241	JUN 16	4 010	---	---	---
1983	---CCCCCCCC--	MANUAL	80 MAY 26	1 SEP 26	228	MAY 26	2 160	---	---	---
1984	---PCCCCC---	MANUAL	147 MAY 18	1 JUL 17	366	MAY 18	1 840	---	---	---
1985	---CCCCCCCC--	MANUAL	104 JUN 08	1 JUL 30	611	JUN 08	3 130	---	---	---

MANUAL - MANUAL SAMPLING

C - COMPLETE MONTH

P - PARTIAL MONTH

* - EXTREME FOR PERIOD OF RECORD

PADDLE RIVER NEAR ROCKFORT BRIDGE - STATION NO. 078B004

INSTANTANEOUS SUSPENDED SEDIMENT FOR 1985

DATE	TIME	WATER	INSTANT.	SINGLE	TYPE	INSTANT.	DISSOLVED	PERCENT FINER THAN INDICATED SIZE, IN MILLIMETRES										PERCENT		
		DISCHARGE	DISCHARGE	SAMPLING	OF	CONCENT.	SOLIDS	.002	.004	.008	.016	.031	.062	.125	.250	.500	1.00	2.00	SAND	SILT CLAY
		[C]	[m ³ /s]	[m]		[mg/L]	[mg/L]													
MAY 06	17:00	5.0	3.81	10RB	DIP	32	181													
JUL 15	14:00	20.0	0.227	10RB	DIP	18	234													
AUG 15	14:00	12.0	0.194	10RB	DIP	303	308	70	88	94	95	98	98	99	100				2	16 88
SEP 09	14:20	8.0	2.29	10RB	DIP	18	237													
OCT 07	14:50	3.0	0.153	10RB	DIP	14	249													

NOTE - SINGLE VERTICAL IS UNDETERMINED FOR 1985

PADDLE RIVER NEAR ROCKFORT BRIDGE - STATION NO. 078B004

HISTORICAL SEDIMENT DATA SUMMARY

YEAR	PERIOD OF OPERATION	TYPE OF SAMPLING	SAMPLED CONCENTRATION		SUSPENDED SEDIMENT LOAD		SUMMARY		
	SUMMARY		MAXIMUM	MINIMUM	MAXIMUM DAILY	TOTAL FOR PERIOD	MEAN LOAD (TONNES)	HISTORICAL MEAN LOAD (TONNES)	STANDARD ERROR OF MEAN %
	(JFMAMJJASOND)		(mg/L)	(mg/L)	(TONNES)	(TONNES)			
1974	-----PPPP--	MANUAL	422 JUL 14	10 OCT 31	---	---	---	---	---
1975	---PPPPPP---	MANUAL	1 270 MAY 05	5 JUN 17 *	---	---	---	---	---
1976	---PPPPPP---	MANUAL	882 APR 06	5 MAY 20	---	---	---	---	---
1977	---PP-PP---	MANUAL	880 MAY 30	11 JUN 23	---	---	---	---	---
1978	---PPPPPP---	MANUAL	1 430 JUN 15	18 AUG 28	---	---	---	---	---
1979	---PPPPPP---	MANUAL	1 600 APR 24 *	8 AUG 20	---	---	---	---	---
1980	---PPPPPP---	MANUAL	918 JUN 28	18 OCT 14	---	---	---	---	---
1981	---PPPPPP---	MANUAL	78 APR 21	10 JUL 08	---	---	---	---	---
1982	---PP-PP---	MANUAL	406 JUL 07	23 NOV 02	---	---	---	---	---
1983	---PP-P---	MANUAL	218 JUN 28	23 SEP 21	---	---	---	---	---
1985	---P-PPPP---	MANUAL	303 AUG 15	14 OCT 07	---	---	---	---	---

MANUAL - MANUAL SAMPLING

P - PARTIAL MONTH

* - EXTREME FOR PERIOD OF RECORD

PEACE RIVER AT DUNVEGAN BRIDGE - STATION NO. 07FD003

INSTANTANEOUS SUSPENDED SEDIMENT FOR 1985

DATE	TIME	WATER TEMP.	INSTANT DISCHARGE	SINGLE SAMPLING VERTICAL	TYPE OF SAMPLER	INSTANT CONCENT.	DISSOLVED SOLIDS	PERCENT FINER THAN INDICATED SIZE, IN MILLIMETRES										PERCENT SAND SILT CLAY	
								.002	.004	.008	.016	.031	.062	.125	.250	.500	1.00		2.00
		(C)	(m ³ /s)	(m)		(mg/L)	(mg/L)												
JUN 03	12:05	11.5	2130	H	MID	X	DN59	263	C	120									
AUG 06	13:30	17.5	689	V	MID	X	DIP	11		130									
OCT 17	15:10	8.0	1730			300	074	18		113									

NOTE - SINGLE VERTICAL LOCATED AT MID (MID STREAM) FOR 1985

DISCHARGE SYMBOL(S): H - DAILY MEAN V - DAILY MEAN; MANUAL GAUGE
 CONCENTRATION SYMBOL(S): C - COARSE MATERIAL PRESENT
 VERTICAL SYMBOL(S): X - NOT AT REGULAR SINGLE SAMPLE VERTICAL

PEACE RIVER AT DUNVEGAN BRIDGE - STATION NO. 07D003

HISTORICAL SEDIMENT DATA SUMMARY

YEAR	PERIOD OF OPERATION	TYPE OF SAMPLING	SAMPLED CONCENTRATION				SUSPENDED SEDIMENT LOAD		SUMMARY MAY-OCT		
	SUMMARY		MAXIMUM	MINIMUM	MAXIMUM DAILY	TOTAL FOR PERIOD	MEAN LOAD	HISTORICAL MEAN LOAD	STANDARD ERROR OF MEAN %		
	[JFMAMJJASOND]		(mg/L)	(mg/L)	(TONNES)	(TONNES)	(TONNES)	(TONNES)	(TONNES)		
1975	---PCCCCC---	MANUAL	2 470 MAY 27	10 OCT 21 *	472 000 MAY 27 *	6 270 000 *	32 300	32 300	---		
1976	---PPPPP---	MANUAL	804 MAY 06	117 APR 30	---	---	---	---	---		
1977	---P-P---	MANUAL	4 730 JUN 13 *	130 AUG 18	---	---	---	---	---		
1978	---P---P---	MANUAL	242 MAY 23	221 SEP 13	---	---	---	---	---		
1980	---P---	MANUAL	115 OCT 15	115 OCT 15	---	---	---	---	---		
1981	---P---	MANUAL	23 OCT 22	23 OCT 22	---	---	---	---	---		
1982	---P---	MANUAL	85 JUN 22	85 JUN 22	---	---	---	---	---		
1983	---P---	MANUAL	12 SEP 15	12 SEP 15	---	---	---	---	---		
1984	---P---	MANUAL	35 AUG 23	35 AUG 23	---	---	---	---	---		
1985	---P-P-P---	MANUAL	283 JUN 03	11 AUG 08	---	---	---	---	---		

MANUAL - MANUAL SAMPLING

C - COMPLETE MONTH

P - PARTIAL MONTH

* - EXTREME FOR PERIOD OF RECORD

PEACE RIVER AT PEACE POINT - STATION NO. 07K001

INSTANTANEOUS SUSPENDED SEDIMENT FOR 1985

DATE	TIME	WATER TEMP.	INSTANT DISCHARGE	SINGLE SAMPLING VERTICAL	TYPE OF SAMPLER	INSTANT CONCENT. (mg/L)	DISSOLVED SOLIDS (mg/L)	PERCENT FINER THAN INDICATED SIZE, IN MILLIMETRES										PERCENT						
								.002	.004	.008	.015	.031	.062	.125	.250	.500	1.00	2.00	SAND	SILT	CLAY			
[C]		[m ³ /s]		[m]																				
MAY 28	12:15	12.0	3720	351	D40	453	181																	
MAY 28	12:20	12.0	3720	351	D1P	362	185	27	32	59	88	87	95	95	100							5	63	32
MAY 28	12:40	12.0	3720	WELB	X	D1P	266	172	18	24	48	87	92	95	95	100						4	72	24
MAY 28	12:45	12.0	3720	WELB	X	DH48	277	178	19	26	45	68	90	97	98	100						3	91	28
JUL 10	14:00	17.5	2970	351	D48	184	148																	
JUL 10	14:05	17.5	2970	351	D1P	169	141																	
JUL 10	14:20	17.5	2970	WELB	X	DH48	184	158																
OCT 29	15:50		2200	351	D48	86	138																	
OCT 29	16:10		2200	WELB	X	DH48	78	147																

NOTE: SINGLE VERTICAL LOCATED AT 351 METRES FOR 1985

VERTICAL SYMBOL(S): X - NOT AT REGULAR SINGLE SAMPLE VERTICAL

PEACE RIVER AT PEACE POINT - STATION NO. 07K001

HISTORICAL SEDIMENT DATA SUMMARY

YEAR	PERIOD OF OPERATION SUMMARY	TYPE OF SAMPLING	SAMPLED CONCENTRATION		SUSPENDED SEDIMENT LOAD		SUMMARY MAY-SEP			
			MAXIMUM	MINIMUM	MAXIMUM DAILY	TOTAL FOR PERIOD	MEAN LOAD	HISTORICAL MEAN LOAD	STANDARD ERROR OF MEAN %	
			(MG/L)	(MG/L)	(TONNES)	(TONNES)	(TONNES)	(TONNES)		
[JFMAMJJASOND]										
1987	---PCCCC---	MANUAL	2 060 MAY 24	30 SEP 21	2 340 000 JUN 07	47 900 000 *	---	---	---	
1988	---CCCC---	MANUAL	4 490 JUN 20 *	83 SEP 08	2 470 000 JUN 18	21 700 000	142 000	142 000	---	
1989	---CCCC---	MANUAL	1 030 MAY 18	135 JUL 04	882 000 MAY 07	14 100 000	52 400	117 000	21.2	
1970	-P-PP-P-P-	MANUAL	507 MAY 08	42 FEB 23	---	---	---	---	---	
1971	---PCCC---	MANUAL	3 810 JUN 23	34 SEP 30	---	---	---	---	---	
1972	P-PP-P-PPPP-	MANUAL	3 030 JUN 22	14 NOV 29 *	2 570 000 JUN 22 *	35 600 000	---	---	---	
1973	-PPPP-P-P-	MANUAL	1 160 MAY 10	27 MAR 27	---	---	---	---	---	
1974	---P-PPPP-	MANUAL	2 190 MAY 08	51 SEP 25	---	---	---	---	---	
1975	---P---	MANUAL	273 JUN 03	261 JUN 28	---	---	---	---	---	
1976	---PPPP---	MANUAL	1 410 JUL 14	138 SEP 17	---	---	---	---	---	
1977	---P---	MANUAL	383 MAY 08	195 OCT 28	---	---	---	---	---	
1978	---P-P---	MANUAL	1 080 MAY 12	235 JUL 19	---	---	---	---	---	
1979	---PP-P---	MANUAL	825 JUN 21	106 SEP 21	---	---	---	---	---	
1980	---PP-P-P-	MANUAL	1 420 JUN 27	48 OCT 21	---	---	---	---	---	
1981	---PPP-P-P-	MANUAL	950 MAY 19	35 SEP 14	---	---	---	---	---	
1982	---P-PPP-	MANUAL	3 230 AUG 10	74 SEP 30	---	---	---	---	---	
1983	---P-P-P-	MANUAL	244 JUN 13	97 NOV 03	---	---	---	---	---	
1984	---PPP-P-P-	MANUAL	2 320 JUN 15	31 AUG 27	---	---	---	---	---	
1985	---P-P-P-	MANUAL	453 MAY 28	78 OCT 29	---	---	---	---	---	

MANUAL - MANUAL SAMPLING

C - COMPLETE MONTH

P - PARTIAL MONTH

* - EXTREME FOR PERIOD OF RECORD

PEACE RIVER AT PEACE RIVER - STATION NO. 07H4001

SUSPENDED SEDIMENT FOR 1985

LOCATION: LAT 55 14 41 N LONG 117 10 46 W
 DRAINAGE AREA: 188 000 km²
 TYPE OF FLOW: REGULATED SINCE 1967
 TYPE OF GAUGE: RECORDING

TOTAL SUSPENDED SEDIMENT LOAD 5 000 000 TONNES FOR THE PERIOD APR 28 TO NOV 04

REMARKS:

APR				MAY				JUN				
DAY	DAILY DISCHARGE (m ³ /s)	MEAN CON- CENTRATION (mg/L)	DAILY LOAD (t)	DAY	DAILY DISCHARGE (m ³ /s)	MEAN CON- CENTRATION (mg/L)	DAILY LOAD (t)	DAY	DAILY DISCHARGE (m ³ /s)	MEAN CON- CENTRATION (mg/L)	DAILY LOAD (t)	DAY
1	2 080 S			2	2 190	189	30 100	3	2 880	343	84 800	1
2	2 000 S			3	2 980	128	22 000	4	2 830	344	87 100	2
3	1 800 S			4	1 920	103	17 100	5	3 030	382 S	100 000	3
4	1 820 S			5	2 010	119	20 700	6	3 090	388	104 000	4
5	1 880 S			6	2 270	202	57 800	7	3 270	429	121 000	5
6				7	2 480	421	89 100	8	3 310	438	125 000	6
7	1 910 S			8	2 540	507 S	111 000	9	3 380	298	115 000	7
8	1 980 S			9	2 930	410	88 800	10	3 240	308 S	86 200	8
9	2 280 S			10	2 480	287	55 400	11	3 050	262	69 000	9
10	2 480 S			11	2 470	242 S	51 800	12	2 820	180	41 400	10
11	2 470 S			12	2 470	232	48 500	13	2 130	118	31 300	11
12	2 580 S			13	2 420	209	42 700	14	2 310	128 S	24 900	12
13	2 850 S			14	2 480	228	49 100	15	2 420	178	37 200	13
14	2 880			15	2 420	261	42 000	16	2 810	222	99 100	14
15	2 510			16	2 370	172	35 400	17	2 710	219	51 300	15
16				17	2 380	142	29 200	18	2 780	227	58 300	16
17	2 520			18	2 320	109 S	21 800	19	2 810	182 S	38 800	17
18	2 480			19	2 480	130 S	27 800	20	2 840	124	29 400	18
19	2 280			20	2 720	478	112 000	21	2 890	103	22 400	19
20	2 280			21	3 080	928 S	245 000	22	2 820	105	24 000	20
21	2 200			22	2 880	865	185 000	23	2 880	183	37 800	21
22	2 050			23	3 020	741 S	192 000	24	3 020	224	58 400	22
23	2 110			24	3 470	931	278 000	25	2 820	131	32 000	23
24	2 190			25	3 280	848 S	247 000	26	2 840	88 S	29 100	24
25	2 370			26	3 320	897	249 000	27	2 820	226	55 300	25
26				27				28				26
26	2 310	224 S	44 700	28	3 280	798	220 000	29	3 180	601	185 000	27
27	2 310	203	40 500	29	3 180	899 S	245 000	30	3 380	855	246 000	28
28	2 370	224	48 800	30	3 040	757	198 000	31	3 280	815 S	231 000	29
29	2 320	191	38 500	31	2 890	325	72 700		3 210	744	206 000	30
30	2 280	188	32 200		2 720	320 S	71 800		3 180	592	183 000	31
31					2 810	342	83 000					31
TOTAL	57 740		201 800		81 550		2 221 000		88 240		2 802 700	TOTAL

JUL				AUG				SEP				
DAY	DAILY DISCHARGE (m ³ /s)	MEAN CON- CENTRATION (mg/L)	DAILY LOAD (t)	DAILY DISCHARGE (m ³ /s)	MEAN CON- CENTRATION (mg/L)	DAILY LOAD (t)	DAILY DISCHARGE (m ³ /s)	MEAN CON- CENTRATION (mg/L)	DAILY LOAD (t)	DAY		
1	3 080	488	132 000	1 420	36	3 180	1 820	21	3 200			
2	3 020	426 S	114 000	1 280	24	2 820	1 810	20	3 130	2		
3	3 080	405	107 000	1 280	24	2 880	1 720	16	2 240	3		
4	3 070	388	106 000	1 300	22	2 470	1 520	12	1 890	4		
5	2 880	323	83 100	1 150 A	19	1 890	1 720	12	1 790	5		
6	2 720	287	63 000	1 020 E	18	1 600	1 720	18 S	2 240	6		
7	2 840	258	58 800	880 E	18	1 370	1 890	15	3 480	7		
8	2 320	180 S	38 200	874 A	20	1 510	1 850	14	2 240	8		
9	2 120	132	24 200	1 120	28	2 440	1 940	18	2 860	9		
10	2 170	101	18 800	1 170	27	3 720	1 940	14	2 260	10		
11	2 310	84 S	18 800	1 280	28	3 020	1 800	12	1 870	11		
12	2 410	82	17 100	1 130	28	2 840	1 880	14	2 270	12		
13	2 340	81	18 400	1 040	25 S	2 280	1 950	15	3 830	13		
14	2 290	80	18 800	1 030	24	2 140	1 820	19	2 490	14		
15	2 280	82	18 000	1 140	24	2 280	2 280	70	13 800	15		
16	2 110	77	14 000	1 230	25	2 880	2 880	282	88 200	16		
17	1 780	51	7 880	1 270	28	3 070	3 180	627 S	145 000	17		
18	2 080	82	8 300	1 820	30	4 220	3 090	488	122 000	18		
19	2 070	50 S	8 940	1 780	32	8 020	3 120	242	91 800	19		
20	1 890	48	7 840	1 870	32	4 240	3 010	285	88 800	20		
21	1 800	48	7 180	1 770	32	4 880	2 880	222	55 300	21		
22	1 800	42	6 940	1 880	32 S	8 200	2 870	211	52 300	22		
23	1 390	40	4 800	1 890	32	5 220	3 120	223	82 800	23		
24	1 840	39	5 520	1 870	32	5 480	2 040	187	48 100	24		
25	1 890	29 S	5 280	1 930	32	5 240	2 810	142 S	34 700	25		
26	1 780	27	5 620	1 920	32	5 310	2 820	112	25 400	26		
27	1 540	23	4 880	1 880	31	4 880	2 840	100 S	22 300	27		
28	1 700	21	4 550	1 920	30	4 980	2 590	100	22 400	28		
29	1 580	27 S	3 890	1 840	28	4 450	2 680	104	22 800	29		
30	1 480	26	3 220	1 900	28	4 100	2 580	108	22 800	30		
31	1 660	29	4 160	1 920	22 S	3 870				31		
TOTAL	86 470		828 480	45 584		108 100	70 820		812 270	TOTAL		

A - MANUAL GAUGE S - ICE CONDITIONS E - ESTIMATED S - SAMPLE(S) COLLECTED THIS DAY

PEACE RIVER AT PEACE RIVER - STATION NO. 07HA001

SUSPENDED SEDIMENT FOR 1985

SEPT						NOV						DAY
DAY	DAILY DISCHARGE (m ³ /s)	MEAN CON-CENTRATION (mg/L)	DAILY LOAD (t)		DAILY DISCHARGE (m ³ /s)	MEAN CON-CENTRATION (mg/L)	DAILY LOAD (t)		DAILY DISCHARGE (m ³ /s)	MEAN CON-CENTRATION (mg/L)	DAILY LOAD (t)	
1	3 490	102 S	21 800	*	1 940	18	3 180	*				1
2	2 390	81	18 800	*	1 930	17	2 830	*				2
3	2 230	83	10 200	*	1 830	13	2 080	*				3
4	3 300	49	9 120	*	1 800	12 S	1 870	*				4
5	1 990	33	3 930	*	1 940			*				5
6	1 990	34	4 130	*	2 100			*				6
7	2 150	29	5 390	*	2 080			*				7
8	2 040	28	4 940	*	1 950			*				8
9	2 980	26 S	5 030	*	1 880			*				9
10	2 000	27	4 870	*	1 810			*				10
11	1 890	25	4 020	*	1 800			*				11
12	1 900	25	4 100	*	1 830			*				12
13	1 800	21	3 270	*	1 880			*				13
14	2 050	29	5 140	*	1 870			*				14
15	2 050	30	5 310	*	1 740			*				15
16	2 120	37 S	5 780	*	1 770			*				16
17	2 190	38	7 190	*	1 780			*				17
18	2 130	38	5 890	*	1 770			*				18
19	2 020	32	5 580	*	1 820			*				19
20	2 140	36	5 860	*	1 830			*				20
21	2 200	37	7 030	*	1 970			*				21
22	2 170	37	5 940	*	2 080 A			*				22
23	2 200	37	7 030	*	1 840 E			*				23
24	2 100	35	5 980	*	2 040 E			*				24
25	2 090	31	5 800	*	1 970 E			*				25
26	1 980	28	4 790	*	1 840 E			*				26
27	2 000	28	4 320	*	1 850 A			*				27
28	1 930	31	3 500	*	2 030			*				28
29	1 920	27	2 830	*	2 020			*				29
30	1 880	17	2 780	*	2 170			*				30
31	1 940	19	3 180	*				*				31
TOTAL	84 180		196 420	*	56 570		9 940	*				TOTAL

A - MANUAL GAUGE

E - ESTIMATED S - SAMPLE(S) COLLECTED THIS DAY

PEACE RIVER AT PEACE RIVER - STATION NO. 07HA001

INSTANTANEOUS SUSPENDED SEDIMENT FOR 1985

DATE	TIME	WATER TEMP [C]	INSTANT DISCHARGE [m ³ /s]	SINGLE VERTICAL SAMPLING OF [m]	TYPE OF SAMPLER	INSTANT. CONCENT. [mg/L]	DISSOLVED SOLIDS [mg/L]	PERCENT FINER THAN INDICATED SIZE, IN MILLIMETRES										PERCENT SAND SILT CLAY		
								.002	.004	.008	.015	.031	.062	.125	.250	.500	1.00	2.00		
APR 26	19 10	4.8	2380	---	D74	225	150													
MAY 07	10 15	8.0	2570	---	D74	848	150	30	42	58	69	85	93	97	100			8	50	42
MAY 10	14 45	10.0	2490	---	D74	242	147													
MAY 17	19 30	12.0	2320	---	D74	105	142													
MAY 17	19 40	12.0	2320	---	D74	107	139													
MAY 18	12 05	11.0	2470	---	D74	116	140													
MAY 18	12 20	11.0	2470	---	D74	122	142													
MAY 20	15 55	12.0	2680	---	D74	824	148													
MAY 20	16 10	12.0	2080	---	D74	817	150													
MAY 22	15 55	12.0	3010	---	D74	753	168	11	15	27	39	54	87	94	99	100		13	72	15
MAY 24	15 35	11.0	3390	---	D74	872	150	18	23	34	44	63	77	90	98	100		23	54	23
MAY 27	15 45	10.5	3200	---	D74	921	127	07	10	20	28	48	67	87	98	100		33	57	10
MAY 30	15 00	11.8	3740	---	D74	331	143													
JUN 03	15 00	13.0	3100	---	D74	391	132													
JUN 06	15 28	11.8	3180	---	D74	293														
JUN 12	15 30	12.0	2400	---	D74	138														
JUN 17	15 20	12.0	3526	---	D74	159	123													
JUN 24	15 05	12.0	2840	---	D74	82														
JUN 26	15 40	14.0	3210	---	D74	803	133	17	25	45	48	69	78	90	99	100		21	54	25
JUL 02	10 05	18.0	3000	---	D74	432	148													
JUL 08	20 00	17.0	2380	---	D74	188	123													
JUL 11	09 50	17.5	2360	---	D74	83	129													
JUL 18	11 10	18.0	2100	---	D74	50														
JUL 25	12 00	18.0	1520	---	D74	39	140													
JUL 29	10 50	18.8	1580	---	D74	27														
AUG 12	12 00	19.0	1010	---	D74	25	143													
AUG 22	13 00	18.0	1830	---	D74	32														
AUG 31	12 00	14.0	2910	---	D74	22														
SEP 05	17 00	11.0	1730	---	D74	16														
SEP 17	15 10	10.0	3190	---	D74	557	148	21	31	47	58	72	80	86	96	100		20	48	31
SEP 25	15 30	11.0	2790	---	D74	129														
SEP 27	12 05	8.0	2500	---	D74	99														
OCT 01	15 30	9.0	2800	---	D74	102	129													
OCT 09	13 20	6.5	2110	---	D74	29	131													
OCT 15	15 00	7.0	2200	---	D74	41	131													
NOV 04	13 25	3.0	1800	H	D74	13	131													

NOTE: SINGLE VERTICAL LOCATED AT MID (MID STREAM) FOR 1985

DISCHARGE SYMBOL(S): H - DAILY MEAN

PEACE RIVER AT PEACE RIVER - STATION NO. 07HA001

HISTORICAL SEDIMENT DATA SUMMARY

YEAR	PERIOD OF OPERATION	TYPE OF SAMPLING	SAMPLED CONCENTRATION		SUSPENDED SEDIMENT LOAD		SUMMARY : JAN-DEC		
	SUMMARY		MAXIMUM	MINIMUM	MAXIMUM DAILY	TOTAL FOR PERIOD	MEAN LOAD (TONNES)	HISTORICAL MEAN LOAD (TONNES)	STANDARD ERROR OF MEAN %
			(mg/L)	(mg/L)	(TONNES)	(TONNES)			
(JFMAMJJASOND)									
1955	----CCCC--	MANUAL	3 800 AUG 30	15 OCT 25	1 080 000 AUG 30	12 800 000	---	---	---
1957	---PCCCCC	MANUAL	2 210 MAY 19	10 SEP 19	1 440 000 JUN 04	31 800 000	---	---	---
1958	CCC-CCCCC	MANUAL	7 060 JUN 14	23 JAN 05	3 800 000 JUN 14	18 700 000	---	---	---
1959	CCC-CCCCC	MANUAL	4 800 MAY 01	11 DEC 10	1 630 000 MAY 02	12 800 000	---	---	---
1970	CCCCCCCCC	MANUAL	2 670 APR 18	8 SEP 21	827 000 JUN 05	15 500 000	45 100	45 100	---
1971	CCCCCCCCC	MANUAL	6 930 JUN 18	8 NOV 16	5 340 000 JUN 18	58 100 000	159 000	102 000	55.8
1972	CCCCCCCCC	MANUAL	8 090 JUN 15	3 MAR 17	14 600 000 JUN 14	78 300 000	208 000	127 000	35.2
1973	CCCCCCCCC	MANUAL	3 300 APR 13	2 SEP 11 *	1 120 000 APR 14	31 500 000	86 200	125 000	0.0
1974	CCCCCCCCC	MANUAL	6 310 APR 23	13 NOV 02	4 030 000 APR 26	59 000 000	162 000	122 000	0.0
1975	CCCCCCCCC	MANUAL	2 220 JUL 02	7 FEB 20	1 370 000 JUL 01	18 800 000	46 000	118 000	0.0
1976	CCCCCCCCC	MANUAL	5 000 AUG 19	10 JAN 23	3 330 000 AUG 19	51 900 000	142 000	121 000	0.0
1977	CCCCCCCCC	MANUAL	6 380 JUN 11	20 FEB 08	3 280 000 JUN 11	42 400 000	116 000	121 000	0.0
1978	--P-CCCC--P	MANUAL	3 020 JUL 13	2 SEP 05	794 000 JUN 17	11 100 000	---	---	---
1979	--P-CCC-PCP-	MANUAL	4 160 MAY 18	10 MAR 29	1 430 000 MAY 18	23 300 000	---	---	---
1980	--PPCCCCC--	MANUAL	2 530 JUN 09	7 MAR 13	1 880 000 JUN 05	17 300 000	---	---	---
1981	PPP-CCCCC--	MANUAL	7 410 MAY 08	12 JAN 27	1 670 000 MAY 09	18 300 000	---	---	---
1982	--P-CCCC--P	MANUAL	9 140 AUG 04 *	25 NOV 01	4 760 000 JUL 17	40 300 000	---	---	---
1983	---CCPPCC--	MANUAL	4 840 JUN 22	25 SEP 22	1 980 000 JUL 17	25 100 000	---	---	---
1985	---PCCCCCP-	MANUAL	924 MAY 20	13 NOV 04	279 000 MAY 23	8 090 000	---	---	---

MANUAL - MANUAL SAMPLING

C - COMPLETE MONTH

P - PARTIAL MONTH

* - EXTREME FOR PERIOD OF RECORD

PEIGAN CREEK NEAR PAKOWKI ROAD - STATION NO. 05AH041

INSTANTANEOUS SUSPENDED SEDIMENT FOR 1985

DATE	TIME	WATER	INSTANT	SINGLE	TYPE	INSTANT	DISSOLVED	PERCENT FINER THAN INDICATED SIZE, IN MILLIMETRES										PERCENT			
		TEMP.	DISCHARGE	SAMPLE		CONCENT.	SOLIDS	002	004	008	016	031	062	125	250	500	1.00	2.00	SAND	SILT	CLAY
		(C)	(m ³ /s)	VERTICAL SAMPLER (m)		(mg/L)	(mg/L)														
MAR 19	08 00	0.0	4.94	12.0 X	DH48	315	157	25	44	61	73	82	89	95	99	100		11	45	44	
MAR 21	11 30	0.0	4.28	13.0 X	DH48	361	165	26	46	63	83	91	95	96	99	100		5	50	45	
MAR 26	08 30	0.0	1.17	6.0 X	DH48	81	185														
APR 02	11 05	4.0	12.5	18.0 X	DH48	1320	171	23	30	48	57	74	88	94	99	100		14	54	30	
APR 04	18 30	4.0	2.89	6.8 X	DH48	185	170														
APR 10	10 20	6.0	8.58	16.5 X	DH48	403	172	24	32	56	69	88	94	97	99	100		8	62	32	
APR 15	11 40	8.0	2.27	2.2 X	DH48	38	220														
MAY 01	10 05	8.5	0.824	4.3 X	DH48	21	328														
MAY 27	12 30	14.0	0.058	1.8 X	DH48	42	439														

NOTE : SINGLE VERTICAL IS UNDETERMINED FOR 1985

VERTICAL SYMBOL(S) : X - NOT AT REGULAR SINGLE SAMPLE VERTICAL

PEIGAN CREEK NEAR PAKOWKI ROAD - STATION NO. 05AH041

HISTORICAL SEDIMENT DATA SUMMARY

YEAR	PERIOD OF OPERATION SUMMARY	TYPE OF SAMPLING	SAMPLED CONCENTRATION		SUSPENDED SEDIMENT LOAD		SUMMARY		
			MAXIMUM	MINIMUM	MAXIMUM DAILY	TOTAL FOR PERIOD	MEAN LOAD	HISTORICAL MEAN LOAD	STANDARD ERROR OF MEAN %
[JFMAMJJASOND]			(mg/L)	(mg/L)	(TONNES)	(TONNES)	(TONNES)	(TONNES)	
1975	--PPP-----	MANUAL	302 MAR 18	0 MAY 10 *	---	---	---	---	---
1978	--PPP-P-----	MANUAL	393 APR 05	4 MAY 30	---	---	---	---	---
1979	--PPP-----	MANUAL	441 MAR 15	10 MAY 02	---	---	---	---	---
1980	--PP-----	MANUAL	31 MAR 25	15 APR 09	---	---	---	---	---
1981	--P-----	MANUAL	22 MAR 10	22 MAR 10	---	---	---	---	---
1982	-----P-----	MANUAL	127 JUN 04	127 JUN 04	---	---	---	---	---
1985	--PPP-----	MANUAL	1 320 APR 02 *	21 MAY 01	---	---	---	---	---

MANUAL - MANUAL SAMPLING

P - PARTIAL MONTH

* - EXTREME FOR PERIOD OF RECORD

PEMBINA RIVER AT JARVIE - STATION NO. 078C002

INSTANTANEOUS SUSPENDED SEDIMENT FOR 1985

DATE	TIME	WATER	INSTANT.	SINGLE	TYPE	INSTANT	DISSOLVED	PERCENT FINER THAN INDICATED SIZE, IN MILLIMETRES											PERCENT		
		TEMP.	DISCHARGE	SAMPLING	OF	CONCENT.	SOLIDS	.002	.004	.008	.015	.031	.062	.125	.250	.500	1.00	2.00	SAND	SILT	CLAY
		[C]	[m ³ /s]	[m]		[mg/L]	[mg/L]														
APR 10	11 03	1.0	128	14.0	X DHS9	1590	188	8	11	18	25	38	54	68	90	99	100		45	43	11
APR 23	13 28	4.0	94.2	28.0	X DHS9	484	188														
MAY 27	14 00	18.0	24.3	84.0	X DHS9	28	188														
JUN 25	09 45	18.0	20.8	90.0	X DHS9	27	189														
JUN 27	18 20	18.0	72.9	33.0	X DHS9	540	182	20	38	54	67	82	92	97	100			8	54	38	
JUL 30	09 08	30.0	12.5	38.0	X DHS9	14	202														
AUG 25	12 20	18.0	38.0	33.0	X DHS9	120	181														
SEP 24	09 29	4.0	78.6	15.0	X DHS9	281	147	19	28	42	50	62	69	80	96	100		31	41	28	

NOTE : SINGLE VERTICAL LOCATED AT MID (MID STREAM) FOR 1985

VERTICAL SYMBOL(S) : X - NOT AT REGULAR SINGLE SAMPLE VERTICAL

PEMBINA RIVER AT JARVIE - STATION NO. 078C002

HISTORICAL SEDIMENT DATA SUMMARY

YEAR	PERIOD	TYPE	SAMPLED CONCENTRATION		SUSPENDED SEDIMENT LOAD		SUMMARY		
	OF	OF	MAXIMUM	MINIMUM	MAXIMUM	TOTAL	MEAN	HISTORICAL	STANDARD
	OPERATION	SAMPLING			DAILY	FOR			
	SUMMARY					PERIOD			
	[JFMAMJJASOND]		[mg/L]	[mg/L]	[TONNES]	[TONNES]	[TONNES]	[TONNES]	OF MEAN %
1976	--PP-P-P---	MANUAL	534 APR 14	19 SEP 24	---	---	---	---	---
1977	---PPPP-P---	MANUAL	2 120 MAY 11	80 SEP 28	---	---	---	---	---
1978	---PPP-PP-P-	MANUAL	812 JUN 18	31 AUG 31	---	---	---	---	---
1979	---PPPPPP---	MANUAL	1 800 APR 26	11 SEP 19	---	---	---	---	---
1980	---PPPPPPPP---	MANUAL	2 500 APR 17	41 OCT 17	---	---	---	---	---
1981	---PPPPPPPP---	MANUAL	223 APR 10	4 OCT 05	---	---	---	---	---
1982	---P-P-P---	MANUAL	439 AUG 30	220 JUN 11	---	---	---	---	---
1983	---PPPP-P---	MANUAL	1 030 MAY 09	11 OCT 31	---	---	---	---	---
1984	---PPP-PP---	MANUAL	428 JUN 11	3 SEP 04	---	---	---	---	---
1985	---PPPPPP---	MANUAL	1 890 APR 10	14 JUL 30	---	---	---	---	---

MANUAL - MANUAL SAMPLING

P - PARTIAL MONTH

- - - EXTREME FOR PERIOD OF RECORD

PEMBINA RIVER NEAR ENTWISTLE - STATION NO. 078B002

INSTANTANEOUS SUSPENDED SEDIMENT FOR 1985

DATE	TIME	WATER TEMP. [C]	INSTANT. DISCHARGE [m ³ /s]	SINGLE SAMPLING OF VERTICAL [m]	TYPE OF SAMPLER	INSTANT. CONCENT. [mg/L]	DISSOLVED SOLIDS [mg/L]	PERCENT FINER THAN INDICATED SIZE, IN MILLIMETRES											PERCENT		
								.002	.004	.008	.015	.031	.062	.125	.250	.500	1.00	2.00	SAND	SILT	CLAY
APR 12	08:18	0.0	55.9	98.0	DHS9	202	164														
APR 30	09:20	2.0	55.4	84.0	DHS9	73	145														
MAY 29	11:45	10.0	30.9	72.0	DHS9	20	181														
JUN 28	14:18	12.0	20.9	82.0	DHS9	88	181														
JUL 18	10:45	18.0	8.81	38.0	DHS9	3	185														
AUG 13	12:40	11.0	15.4	84.0	DHS9	13	185														
SEP 11	12:55	8.0	19.4	82.0	DHS9	7	172														
OCT 08	12:50	1.0	23.9	82.0	DHS9	10	172														
NOV 05	12:00	0.0	10.7	WERS	DIP	8	208														

NOTE : SINGLE VERTICAL IS UNDETERMINED FOR 1985

PENBINA RIVER NEAR ENTWISTLE - STATION NO. 0789002
HISTORICAL SEDIMENT DATA SUMMARY

YEAR	PERIOD OF OPERATION	TYPE OF SAMPLING	SAMPLED CONCENTRATION		SUSPENDED SEDIMENT LOAD		SUMMARY		
	SUMMARY		MAXIMUM	MINIMUM	MAXIMUM DAILY	TOTAL FOR PERIOD	MEAN LOAD	HISTORICAL MEAN LOAD	STANDARD ERROR OF MEAN %
	[JFMAMJJASOND]		(mg/L)	(mg/L)	(TONNES)	(TONNES)	(TONNES)	(TONNES)	
1974	-----PPPP--	MANUAL	17 JUL 23	2 OCT 29 *	---	---	---	---	---
1975	-----PPPPP--	MANUAL	51 MAY 15	3 AUG 19	---	---	---	---	---
1976	-----PPPPP--	MANUAL	23 AUG 19	7 JUL 19	---	---	---	---	---
1977	-----PPPPP--	MANUAL	128 MAY 08	10 JUN 23	---	---	---	---	---
1978	-----PPPPP--	MANUAL	333 JUN 19	5 AUG 21	---	---	---	---	---
1979	-----PPPPP--	MANUAL	11 JUN 11	5 AUG 13	---	---	---	---	---
1980	-----PPPPP--	MANUAL	353 APR 14 *	10 AUG 18	---	---	---	---	---
1981	-----PP-PP--	MANUAL	159 MAY 11	9 JUL 08	---	---	---	---	---
1982	-----PP-PP--	MANUAL	78 JUL 26	2 SEP 27	---	---	---	---	---
1983	-----P-P-PP--	MANUAL	193 JUN 27	2 SEP 28	---	---	---	---	---
1984	-----P-P-P--	MANUAL	45 SEP 10	8 JUL 04	---	---	---	---	---
1985	-----PPPPPPP--	MANUAL	202 APR 12	3 JUL 16	---	---	---	---	---
MANUAL - MANUAL SAMPLING									
P - PARTIAL MONTH									

MANUAL - MANUAL SAMPLING

P - PARTIAL MONTH

* - EXTREME FOR PERIOD OF RECORD

PIKE CREEK NEAR GRASSLAND - STATION NO. 07CA005
INSTANTANEOUS SUSPENDED SEDIMENT FOR 1985

DATE	TIME	WATER TEMP.	INSTANT DISCHARGE	SINGLE VERTICAL SAMPLING	TYPE OF SAMPLER	INSTANT CONCENT.	DISSOLVED SOLIDS	PERCENT FINER THAN INDICATED SIZE, IN MILLIMETRES										PERCENT SAND SILT CLAY			
								.002	.004	.008	.015	.031	.062	.125	.250	.500	1.00	2.00			
		(C)	(m ³ /s)	(m)	(mg/L)	(mg/L)															

CT																					
APR 04	14 45	0.0	18.5	S	12.0 X DHS9	268	144	30	41	67	77	80	84	80	88	100			18	43	41
APR 09	09 25	1.0	8.19		12.0 X DHS9	342	183	28	48	73	84	87	82	87	100				8	47	45
APR 24	19 30	6.0	5.23		15.0 X DHS9	186	335														
MAY 23	13 05	16.0	3.81		15.0 X DHS9	28	248														
JUN 26	11 28	15.0	0.828		8.0 X DHS8	10	333														
JUL 31	12 33	22.0	0.073	MID	X DIP	18	335														
AUG 27	12 20	19.0	0.003	W	---	DIP	8	860													

NOTE SINGLE VERTICAL LOCATED AT MID (MID STREAM) FOR 1985

DISCHARGE SYMBOL(S): S - ICE CONDITIONS W - DAILY MEAN
VERTICAL SYMBOL(S): X - NOT AT REGULAR SINGLE SAMPLE VERTICAL

PIKE CREEK NEAR GRASSLAND - STATION NO. 07CA005
HISTORICAL SEDIMENT DATA SUMMARY

YEAR	PERIOD OF OPERATION SUMMARY	TYPE OF SAMPLING	SAMPLED CONCENTRATION		SUSPENDED SEDIMENT LOAD		SUMMARY		
			MAXIMUM	MINIMUM	MAXIMUM DAILY	TOTAL FOR PERIOD	MEAN LOAD (TONNES)	HISTORICAL MEAN LOAD (TONNES)	STANDARD ERROR OF MEAN %
	(JFMAMJJASOND)		(mg/L)	(mg/L)	(TONNES)	(TONNES)			
1974	-----PP--	MANUAL	51 AUG 13	48 SEP 17	---	---	---	---	---
1975	-----PPPP--	MANUAL	199 APR 21	18 APR 16	---	---	---	---	---
1976	-----PPPPPP--	MANUAL	583 APR 12 *	8 JUN 15	---	---	---	---	---
1977	-----PPPPPP--	MANUAL	84 JUN 07	21 AUG 10	---	---	---	---	---
1978	-----PPPPPP--	MANUAL	204 JUN 02	41 JUN 27	---	---	---	---	---
1979	-----PPPPPP--	MANUAL	118 MAY 02	15 OCT 31	---	---	---	---	---
1980	-----PPPPPP--	MANUAL	82 SEP 25	23 JUN 04	---	---	---	---	---
1981	-----PPPPPP--	MANUAL	66 APR 21	8 SEP 28 *	---	---	---	---	---
1982	-----PPPP--	MANUAL	35 AUG 04	13 JUN 07	---	---	---	---	---
1983	-----PP--	MANUAL	20 AUG 09	20 AUG 09	---	---	---	---	---
1984	-----PPPPPP--	MANUAL	45 JUN 07	6 SEP 05	---	---	---	---	---
1985	-----PPPPPP--	MANUAL	342 APR 09	8 AUG 27	---	---	---	---	---
MANUAL - MANUAL SAMPLING									
* - EXTREME FOR PERIOD OF RECORD									

MANUAL - MANUAL SAMPLING

P - PARTIAL MONTH

* - EXTREME FOR PERIOD OF RECORD

PONTON RIVER ABOVE BOYER RIVER - STATION NO. 07JF003
INSTANTANEOUS SUSPENDED SEDIMENT FOR 1985

DATE	TIME	WATER TEMP. (C)	INSTANT. DISCHARGE (m ³ /s)	SINGLE VERTICAL SAMPLING (m)	TYPE OF SAMPLER	INSTANT. CONCENT. (mg/L)	DISSOLVED SOLIDS (mg/L)	PERCENT FINER THAN INDICATED SIZE, IN MILLIMETRES										PERCENT SAND SILT CLAY			
								.002	.004	.008	.015	.031	.062	.125	.250	.500	1.00	2.00	SAND	SILT	CLAY
MAY 31	13 20	11.0	23.8	19.0	DM59	408	128	28	38	55	70	78	84	89	97	100			18	48	38
JUN 20	10 30	18.0	12.5	11.0	X DM48	141	133														
JUL 23	18 00	17.0	21.4	20.0	X DM59	726	181	10	18	31	46	84	81	93	98	100			18	83	18
AUG 20	15 45	14.0	8.57	14.0	X DM48	72	135														
SEP 28	13 25	5.0	12.5	18.0	DM59	68	122														
OCT 30	14 35	0.5	3.84	8	25.0 X DM59	23	182														

NOTE : SINGLE VERTICAL LOCATED AT MID (MID STREAM) FOR 1985

DISCHARGE SYMBOL(S) : 8 - ICE CONDITIONS
VERTICAL SYMBOL(S) : X - NOT AT REGULAR SINGLE SAMPLE VERTICAL

PONTON RIVER ABOVE BOYER RIVER - STATION NO. 07JF003
HISTORICAL SEDIMENT DATA SUMMARY

YEAR	PERIOD OF OPERATION SUMMARY	TYPE OF SAMPLING	SAMPLED CONCENTRATION		SUSPENDED SEDIMENT LOAD		SUMMARY		
			MAXIMUM	MINIMUM	MAXIMUM DAILY	TOTAL FOR PERIOD	MEAN LOAD	HISTORICAL MEAN LOAD	STANDARD ERROR OF MEAN %
[JFMAMJJASOND]			(mg/L)	(mg/L)	(TONNES)	(TONNES)	(TONNES)	(TONNES)	
1975	---PP-----	MANUAL	1 880 APR 29	35 APR 22	---	---	---	---	---
1976	---PPPPPP---	MANUAL	3 420 APR 28	19 OCT 27	---	---	---	---	---
1977	---P-PP-PP-	MANUAL	1 050 APR 28	13 OCT 08	---	---	---	---	---
1978	---PPPP-P-	MANUAL	459 MAY 09	20 AUG 03	---	---	---	---	---
1979	---PPPPP-P-	MANUAL	2 200 MAY 18	7 SEP 27	---	---	---	---	---
1980	---PPP---	MANUAL	50 JUL 03	5 AUG 08 *	---	---	---	---	---
1981	---PP-PPP-	MANUAL	353 MAY 27	7 SEP 08	---	---	---	---	---
1982	---PPPP-P-	MANUAL	2 740 MAY 04	8 AUG 25	---	---	---	---	---
1983	---PP-PPP-	MANUAL	321 MAY 05	5 SEP 01	---	---	---	---	---
1984	---PPPPP-	MANUAL	5 070 JUL 04 *	27 MAY 04	---	---	---	---	---
1985	---PPPPPP-	MANUAL	725 JUL 23	23 OCT 30	---	---	---	---	---

MANUAL - MANUAL SAMPLING

P - PARTIAL MONTH

* - EXTREME FOR PERIOD OF RECORD

POPLAR CREEK NEAR FORT McMURRAY - STATION NO. 07DA007
INSTANTANEOUS SUSPENDED SEDIMENT FOR 1985

DATE	TIME	WATER TEMP. (C)	INSTANT. DISCHARGE (m ³ /s)	SINGLE VERTICAL SAMPLING (m)	TYPE OF SAMPLER	INSTANT. CONCENT. (mg/L)	DISSOLVED SOLIDS (mg/L)	PERCENT FINER THAN INDICATED SIZE, IN MILLIMETRES										PERCENT SAND SILT CLAY		
								.002	.004	.008	.015	.031	.062	.125	.250	.500	1.00	2.00		
APR 28	15 45	4.0	2.08	8.5	X DM48	82	304													
JUN 12	12 45	16.0	1.19	8.0	X DM48	11	238													
AUG 19	15 10	20.0	0.030	MID	X DIP	17	671													

NOTE : SINGLE VERTICAL IS UNDETERMINED FOR 1985

VERTICAL SYMBOL(S) : X - NOT AT REGULAR SINGLE SAMPLE VERTICAL

POPLAR CREEK NEAR FORT McMURRAY - STATION NO. 07DA007
HISTORICAL SEDIMENT DATA SUMMARY

YEAR	PERIOD OF OPERATION SUMMARY	TYPE OF SAMPLING	SAMPLED CONCENTRATION		SUSPENDED SEDIMENT LOAD		SUMMARY - APR-OCT		
			MAXIMUM	MINIMUM	MAXIMUM DAILY	TOTAL FOR PERIOD	MEAN LOAD	HISTORICAL MEAN LOAD	STANDARD ERROR OF MEAN
	(JFMAMJJASOND)		(mg/L)	(mg/L)	(TONNES)	(TONNES)	(TONNES)	(TONNES)	(TONNES)
1974	-----P--	MANUAL	4 OCT 07	4 OCT 07	---	---	---	---	---
1975	---PPPP--	MANUAL	362 MAY 28	22 JUN 02	---	---	---	---	---
1976	CCCCCCCC	MANUAL	542 APR 08 *	5 NOV 05	383 AUG 30	2 840	11.8	11.8	---
1977	-----P--	MANUAL	71 APR 20	5 SEP 19	28.8 APR 20	700	3.27	7.64	55.8
1978	-----P--	MANUAL	387 SEP 12	5 AUG 04	521 SEP 12 *	4 330 *	20.2	11.8	41.4
1979	---PPPP--	MANUAL	136 APR 23	10 OCT 19	---	---	---	---	---
1980	---PPPP--	MANUAL	54 APR 21	5 OCT 20	---	---	---	---	---
1981	---P-PP--	MANUAL	21 MAY 26	12 AUG 26	---	---	---	---	---
1982	---P-PP--	MANUAL	9 JUN 21	3 SEP 19 *	---	---	---	---	---
1983	---P-PP--	MANUAL	18 APR 29	5 AUG 03	---	---	---	---	---
1984	---P-PP--	MANUAL	51 JUN 25	11 AUG 07	---	---	---	---	---
1985	---P-PP--	MANUAL	82 APR 28	11 JUN 13	---	---	---	---	---

MANUAL - MANUAL SAMPLING

C - COMPLETE MONTH

P - PARTIAL MONTH

* - EXTREME FOR PERIOD OF RECORD

RAM RIVER NEAR THE MOUTH - STATION NO. OSDCO08
INSTANTANEOUS SUSPENDED SEDIMENT FOR 1985

DATE	TIME	WATER TEMP.	INSTANT. DISCHARGE	SINGLE SAMPLING VERTICAL SAMPLER	TYPE	INSTANT. CONCENT. OF SOLIDS	PERCENT FINER THAN INDICATED SIZE, IN MILLIMETRES										PERCENT SAND	PERCENT SILT	PERCENT CLAY
							.002	.004	.008	.015	.031	.062	.125	.250	.500	1.00			
		(C)	(m ³ /s)	(m)		(mg/L)	(mg/L)												
JUN 13	12 35	15.0	20.5	24.0	X DH48	88	226												
JUL 18	18 20	13.0	12.5	28.0	X DH48	15	254												
AUG 22	15 30	8.0	40.7	40.0	X DH48	164	208												
SEP 28	18 10	4.0	28.4	16.0	X DH48	22	229												

NOTE SINGLE VERTICAL IS UNDETERMINED FOR 1985

VERTICAL SYMBOL(S) X - NOT AT REGULAR SINGLE SAMPLE VERTICAL

RAM RIVER NEAR THE MOUTH - STATION NO. OSDCO08
HISTORICAL SEDIMENT DATA SUMMARY

YEAR	PERIOD OF OPERATION SUMMARY	TYPE OF SAMPLING	SAMPLED CONCENTRATION		SUSPENDED SEDIMENT LOAD		SUMMARY		
			MAXIMUM	MINIMUM	MAXIMUM DAILY	TOTAL FOR PERIOD	MEAN LOAD	HISTORICAL MEAN LOAD	STANDARD ERROR OF MEAN
	(JFMAMJJASOND)		(mg/L)	(mg/L)	(TONNES)	(TONNES)	(TONNES)	(TONNES)	(TONNES)
1976	---PPPP--	MANUAL	355 AUG 12	12 APR 26	---	---	---	---	---
1977	---PPPP--	MANUAL	242 MAY 28	11 SEP 15	---	---	---	---	---
1978	---PPPP--	MANUAL	394 MAY 23	4 SEP 26	---	---	---	---	---
1979	---PPPP--	MANUAL	43 MAY 22	0 AUG 14 *	---	---	---	---	---
1980	---PPPP--	MANUAL	1 500 JUN 05 *	8 OCT 28	---	---	---	---	---
1981	---PPP-PP--	MANUAL	142 MAY 28	1 SEP 28	---	---	---	---	---
1982	---PPP-PP--	MANUAL	685 JUL 08	1 SEP 14	---	---	---	---	---
1983	---PPPP--	MANUAL	1 330 MAY 30	2 SEP 27	---	---	---	---	---
1984	---PPPP--	MANUAL	39 JUN 20	1 AUG 20	---	---	---	---	---
1985	---PPP-PP--	MANUAL	184 AUG 22	15 JUL 15	---	---	---	---	---

MANUAL - MANUAL SAMPLING

P - PARTIAL MONTH

* - EXTREME FOR PERIOD OF RECORD

RED DEER RIVER AT DRUMHELLER - STATION NO. 05CE001

INSTANTANEOUS SUSPENDED SEDIMENT FOR 1985

DATE	TIME	WATER TEMP. [C]	INSTANT DISCHARGE [m ³ /s]	SINGLE VERTICAL SAMPLING [m]	TYPE OF SAMPLER	INSTANT. CONCENT. [mg/L]	DISSOLVED SOLIDS [mg/L]	PERCENT FINER THAN INDICATED SIZE, IN MILLIMETRES										PERCENT			
								.002	.004	.008	.015	.031	.062	.125	.250	.500	1.00	2.00	SAND	SILT	CLAY
APR 03 12:00		1.0	84.9		44.0 X DHS9	1280	252	31	31	41	51	64	85	99	100				4	55	31
APR 05 13:00		2.0	169		WERS X DHS9	1450	242	13	18	29	39	62	87	98	100				13	71	16
APR 11 14:55		7.0	114	H	30RB X DHS9	288	227														
APR 23 18:20		8.0	46.3		44.0 X DHS9	273	243														
MAY 22 10:40		20.0	20.8		28.0 X DHS9	8	260														
JUN 18 10:35		15.0	38.4		23.0 X DHS9	8	204														
JUL 18 11:00		17.0	15.1		MID X DHS9	8	150														
AUG 12 11:25		14.0	31.3		MID X DHS9	32	188														
SEP 10 10:30		7.0	46.8		28.0 DHS9	11	191														
OCT 7 12:20		3.0	35.3		28.0 DHS9	8	221														

NOTE: SINGLE VERTICAL LOCATED AT 10RB (ONE QUARTER THE DISTANCE FROM THE RIGHT BANK) FOR 1985

DISCHARGE SYMBOL(S): H - DAILY MEAN
VERTICAL SYMBOL(S): X - NOT AT REGULAR SINGLE SAMPLE VERTICAL

RED DEER RIVER AT DRUMHELLER - STATION NO. 05CE001

HISTORICAL SEDIMENT DATA SUMMARY

YEAR	PERIOD OF OPERATION (JFMAMJJASOND)	TYPE OF SAMPLING	SAMPLED CONCENTRATION		SUSPENDED SEDIMENT LOAD		SUMMARY MAR-OCT		
			MAXIMUM [mg/L]	MINIMUM [mg/L]	MAXIMUM DAILY [TONNES]	TOTAL FOR PERIOD [TONNES]	MEAN LOAD [TONNES]	HISTORICAL MEAN LOAD [TONNES]	STANDARD ERROR OF MEAN %
1975	---PPPPPPPPPP	MANUAL	4 750 MAY 05	0 FEB 21 *	118 000 APR 21	807 000	---	---	---
1976	PPPPPPPPPPPP	MANUAL	2 850 JUN 14	3 OCT 01	18 400 APR 12	184 000	---	---	---
1977	CCCCCCCCCCCC	MANUAL	6 870 MAY 23	4 DEC 18	55 800 MAY 23	282 000	1 590	1 590	---
1978	CCCCCCCCCCCC	MANUAL	7 780 SEP 08	2 JAN 05	40 100 SEP 08	854 000	2 870	2 130	28.4
1979	CCCCCCCCCCCC	MANUAL	3 870 JUL 23	2 AUG 19	18 000 JUL 23	110 000	447	1 570	40.5
1980	---CCCCCCCC--	MANUAL	5 530 JUL 28	2 MAY 16	49 600 AUG 05	833 000	3 400	2 030	31.8
1981	---PPPPPPPP--	MANUAL	17 900 MAY 07 *	4 OCT 04	148 000 AUG 01 *	1 220 000 *	---	---	---
1982	---CCCCCCCC--	MANUAL	3 330 JUL 03	8 SEP 23	78 300 JUL 08	888 000	3 500	2 320	25.0
1983	---CCCCCCCC--	MANUAL	5 330 JUL 08	1 OCT 11	84 000 JUL 08	433 000	---	---	---
1984	---CCCCCCCC--	MANUAL	2 390 JUN 10	8 APR 20	7 170 JUN 08	110 000	---	---	---
1985	---PPPPPPPP--	MANUAL	1 450 APR 05	5 JUL 15	---	---	---	---	---

MANUAL - MANUAL SAMPLING

C - COMPLETE MONTH

P - PARTIAL MONTH

* - EXTREME FOR PERIOD OF RECORD

RED DEER RIVER AT RED DEER - STATION NO. 05CC002

INSTANTANEOUS SUSPENDED SEDIMENT FOR 1985

DATE	TIME	WATER TEMP.	INSTANT DISCHARGE	SINGLE VERTICAL SAMPLING	TYPE OF SAMPLER	INSTANT. CONCENT.	DISSOLVED SOLIDS	PERCENT FINER THAN INDICATED SIZE, IN MILLIMETRES										PERCENT		
		(C)	(m ³ /s)	(m)	(mg/L)	(mg/L)	.002	.004	.008	.015	.031	.062	.125	.250	.500	1.00	2.00	SAND	SILT	CLAY
APR 08 15 30			82.8	10LB	DIP	83 C	300													
APR 25 08 30		8.0	27.9	10LB	DHS9	8	240													
APR 25 08 31		8.0	27.9	10LB	DHS9	12 C	241													
MAY 28 14 20		13.0	20.9	10LB	DHS9	3	224													
JUN 27 14 30		18.0	23.0	10LB	DHS9	3	207													
JUL 17 13 00		15.0	15.8	10LB	DHS9	3	212													
AUG 14 12 10		18.0	26.1	10LB	DHS9	2	212													
SEP 12 14 00		10.0	32.4	10LB	DHS9	9	202													
SEP 13 12 40		12.0	182	10LB	DHS9	143	211													
OCT 10 12 20		8.0	32.9	10LB	DHS9	4	214													
NOV 07 13 30		0.0	23.7	10LB	DHS9	82	159													

NOTE: SINGLE VERTICAL LOCATED AT 10LB (ONE QUARTER THE DISTANCE FROM THE LEFT BANK) FOR 1985

CONCENTRATION SYMBOL(S): C - COARSE MATERIAL PRESENT

RED DEER RIVER AT RED DEER - STATION NO. 05CC002

HISTORICAL SEDIMENT DATA SUMMARY

YEAR	PERIOD OF OPERATION SUMMARY	TYPE OF SAMPLING	SAMPLED CONCENTRATION		SUSPENDED SEDIMENT LOAD		SUMMARY - APR-OCT		
			MAXIMUM	MINIMUM	MAXIMUM DAILY	TOTAL FOR PERIOD	MEAN LOAD	HISTORICAL MEAN LOAD	STANDARD ERROR OF MEAN %
	(JFMAMJJASOND)		(mg/L)	(mg/L)	(TONNES)	(TONNES)	(TONNES)	(TONNES)	
1970	-----PP-----	MANUAL	103 JUN 04	12 JUL 17	---	---	---	---	---
1971	-----CCCCCCCC--	MANUAL	1 480 APR 15	0 OCT 12 *	41 400 APR 15	274 000	1 270	1 270	---
1972	-----CCCCCCCC--	MANUAL	2 780 JUN 28	0 AUG 28	154 000 JUN 28 *	508 000	2 340	1 810	28.8
1973	-----CCCCCCCC--	MANUAL	1 380 MAY 28	3 SEP 08	31 700 MAY 28	222 000	1 010	1 540	28.8
1974	-----CCCCCCCC--	MANUAL	1 480 JUN 18	1 OCT 28	28 800 JUN 18	352 000	1 850	1 570	18.4
1975	--PCCCCCCCC--	MANUAL	428 APR 21	1 APR 14	7 480 APR 20	58 800	285	1 310	25.2
1976	--CCCCCCCC--	MANUAL	838 AUG 11	1 OCT 30	7 140 AUG 11	50 400	233	1 130	29.4
1977	--CCCCCCCC--	MANUAL	283 MAY 17	1 DEC 14	3 800 APR 08	52 000	242	1 000	30.8
1978	-----CCCCCCCC--	MANUAL	1 370 JUN 07	0 NOV 07	21 800 JUN 07	131 000	589	850	28.8
1979	PP-----CCCCP--	MANUAL	789 MAY 28	2 SEP 14	7 480 MAY 28	47 800	222	889	29.1
1980	--CCCCCCCC--	MANUAL	1 140 APR 16	4 MAR 27	18 800 APR 16	142 000	662	848	26.8
1981	--CCCCCCCC--	MANUAL	3 080 JUL 31 *	4 APR 18	148 000 JUL 31	740 000 *	3 480	1 090	28.8
1982	--CCCCCCCC--	MANUAL	880 APR 23	2 OCT 25	18 800 JUL 08	206 000	983	1 080	26.8
1983	--CCCCCCCC--	MANUAL	806 APR 26	2 AUG 13	10 400 APR 27	48 400	226	1 010	28.8
1984	--PCCCCCCCC--	MANUAL	52 SEP 28	2 JUN 05	238 SEP 23	6 380	28.0	940	27.8
1985	---PPPPPPPP--	MANUAL	143 SEP 13	2 MAY 28	---	---	---	---	---

MANUAL - MANUAL SAMPLING

C - COMPLETE MONTH

P - PARTIAL MONTH

* - EXTREME FOR PERIOD OF RECORD

RED DEER RIVER BELOW BURNT TIMBER CREEK - STATION NO. 05CA009

INSTANTANEOUS SUSPENDED SEDIMENT FOR 1985

DATE	TIME	WATER TEMP. (C)	INSTANT. DISCHARGE (m ³ /s)	SINGLE VERTICAL SAMPLING OF VERTICAL SAMPLER (m)	TYPE	INSTANT. CONCENT. (mg/L)	DISSOLVED SOLIDS (mg/L)	PERCENT FINER THAN INDICATED SIZE, IN MILLIMETRES							PERCENT SAND SILT CLAY
								.002	.004	.008	.016	.031	.062	.125	
APR 29	10:45	3.0	4.92	MID	X DIP	3	271								
MAY 21	12:00	7.0	38.3	18.0	X D48	80	177								
JUN 21	11:17	8.0	38.7	18.0	X D48	9	183								
JUL 18	11:50	12.0	24.8	22.0	D48	8	198								
AUG 14	14:00	10.0	31.7	MID	X D48	8	213								
SEP 12	08:25	8.0	34.1	22.0	D48	14	217								
SEP 14	15:35	8.0	81.8	10LB	X DIP	51	199								
OCT 10	10:00	1.0	18.6	MID	X DIP	7	247								

NOTE: SINGLE VERTICAL IS UNDETERMINED FOR 1985

DISCHARGE SYMBOL(S):
VERTICAL SYMBOL(S):

H - DAILY MEAN

X - NOT AT REGULAR SINGLE SAMPLE VERTICAL

RED DEER RIVER BELOW BURNT TIMBER CREEK - STATION NO. 05CA009

HISTORICAL SEDIMENT DATA SUMMARY

YEAR	PERIOD OF OPERATION SUMMARY	TYPE OF SAMPLING	SAMPLED CONCENTRATION		SUSPENDED SEDIMENT LOAD		SUMMARY		
			MAXIMUM	MINIMUM	MAXIMUM DAILY	TOTAL FOR PERIOD	MEAN LOAD	HISTORICAL MEAN LOAD	STANDARD ERROR OF MEAN %
	(JFMAMJJASOND)		(mg/L)	(mg/L)	(TONNES)	(TONNES)	(TONNES)	(TONNES)	
1974	-----P-P----	MANUAL	43 JUL 28	8 SEP 03	---	---	---	---	---
1975	-----P-P----	MANUAL	24 JUL 31	2 MAY 29	---	---	---	---	---
1976	-----PPP-----	MANUAL	368 JUL 01	3 MAY 18	---	---	---	---	---
1977	-----PPP-----	MANUAL	178 JUN 02	7 AUG 10	---	---	---	---	---
1978	-----PPP-PP--	MANUAL	730 JUN 05 *	4 SEP 05	---	---	---	---	---
1979	-----PPPP-P--	MANUAL	342 AUG 21	2 OCT 02	---	---	---	---	---
1980	-----PPPPP----	MANUAL	81 JUN 09	3 SEP 28	---	---	---	---	---
1981	-----PP-PP----	MANUAL	107 AUG 28	3 SEP 28	---	---	---	---	---
1982	-----P-PPPP----	MANUAL	18 JUL 05	1 OCT 28	---	---	---	---	---
1983	-----PP-PPPP----	MANUAL	288 MAY 30	0 SEP 27 *	---	---	---	---	---
1984	-----P-PP-PP--	MANUAL	23 AUG 03	3 JUL 10	---	---	---	---	---
1985	---PPPPPPPP--	MANUAL	81 SEP 14	3 APR 29	---	---	---	---	---

MANUAL - MANUAL SAMPLING

P - PARTIAL MONTH

* - EXTREME FOR PERIOD OF RECORD

RED DEER RIVER NEAR BINDLOSS - STATION NO. 05CK004

INSTANTANEOUS SUSPENDED SEDIMENT FOR 1985

DATE	TIME	WATER TEMP. (C)	INSTANT. DISCHARGE (m ³ /s)	SINGLE VERTICAL SAMPLING (m)	TYPE OF SAMPLER	INSTANT. CONCENT. (mg/L)	DISSOLVED SOLIDS (mg/L)	PERCENT FINER THAN INDICATED SIZE, IN MILLIMETRES										PERCENT SAND SILT CLAY				
								.002	.004	.008	.015	.031	.062	.125	.250	.500	1.00	2.00				
APR 18	12:35	11.0	87.1	42.0	DH59	359	245															
MAY 10	10:20	15.0	44.5	42.0	DH59	82	314															
MAY 27	12:06	15.0	28.7	42.0	DH59	78	375															
JUN 24	12:45	18.0	55.0	42.0	DH59	309	272															
JUL 15	12:30	25.0	22.4	42.0	DH59	52	280															
AUG 13	14:15	12.0	58.9	42.0	DH59	555	229	42	82	71	78	81	84	87	97	100			18	22	52	
SEP 10	13:45	11.0	23.3	42.0	DH59	85	233															
SEP 19	09:50	11.0	23.2	42.0	DH59	2950	245	6	20	33	44	50	71	81	97	100			29	51	20	
OCT 01	13:55	2.0	84.0	42.0	DH59	153	253															
OCT 29	15:05	2.0	37.0	42.0	DH59	74	255															

NOTE: SINGLE VERTICAL LOCATED AT MID (MID STREAM) FOR 1985

RED DEER RIVER NEAR BINDLOSS - STATION NO. 05CK004

HISTORICAL SEDIMENT DATA SUMMARY

YEAR	PERIOD OF OPERATION SUMMARY	TYPE OF SAMPLING	SAMPLING CONCENTRATION		SUSPENDED SEDIMENT LOAD		SUMMARY - MAR-OCT		
			MAXIMUM (mg/L)	MINIMUM (mg/L)	MAXIMUM DAILY (TONNES)	TOTAL FOR PERIOD (TONNES)	MEAN LOAD (TONNES)	HISTORICAL MEAN LOAD (TONNES)	STANDARD ERROR OF MEAN %
1966	---CCCCCCCC	MANUAL	11 800 JUL 08 *	35 NOV 03	288 000 JUL 07	1 850 000	---	---	---
1967	CCCCCCCCCCCC	MANUAL	5 000 JUN 04	2 JAN 24	200 000 JUN 04	2 410 000	8 810	8 810	---
1968	CCCCCCCCCCCC	MANUAL	5 890 JUL 25	11 DEC 10	70 300 JUL 25	843 000	3 420	5 820	48.3
1969	CCCCCCCCCCCC	MANUAL	5 840 APR 02	1 MAR 11 *	377 000 APR 02	4 710 000	19 200	10 800	42.4
1970	CCCCCCCCCCCC	MANUAL	11 200 JUN 18	11 MAR 19	345 000 JUN 18	2 930 000	11 900	11 100	29.3
1971	CCCCCCCCCCCC	MANUAL	7 710 APR 15	14 NOV 15	517 000 APR 15 *	4 510 000	15 800	12 800	23.4
1972	CCCCCCCCCCCC	MANUAL	4 390 JUN 29	8 NOV 27	195 000 JUN 29	1 800 000	5 500	11 800	22.6
1973	CCCCCCCCCCCC	MANUAL	8 470 JUN 19	7 FEB 23	122 000 JUN 19	1 570 000	6 400	10 900	21.4
1974	CCCCCCCCCCCC	MANUAL	8 700 APR 15	5 FEB 19	344 000 APR 15	5 280 000 *	21 500	12 200	19.8
1975	CCCCCCCCCCCC	MANUAL	4 790 APR 24	12 DEC 17	155 000 APR 24	1 140 000	4 550	11 400	20.1
1976	CCCCCCCCCCCC	MANUAL	5 550 AUG 19	4 JAN 28	135 000 AUG 19	887 000	3 510	10 800	20.7
1977	CCCCCCCCCCCC	MANUAL	5 020 SEP 24	7 FEB 07	84 800 SEP 23	585 000	2 370	8 830	21.6
1978	CCCCCCCCCCCC	MANUAL	5 380 SEP 14	11 DEC 12	85 900 APR 02	1 840 000	5 580	5 570	20.4
1979	CCCCCCCCCCCC	MANUAL	2 120 AUG 05	10 JAN 02	10 300 AUG 05	305 000	1 240	5 930	21.3
1980	---CCCCCCCC	MANUAL	5 070 AUG 10	35 MAY 12	99 800 APR 15	1 850 000	7 550	8 830	20.0
1981	---CCCCCCCC	MANUAL	5 440 MAY 11	31 OCT 27	125 000 AUG 04	1 710 000	---	---	---
1982	---CCCCCCCC	MANUAL	5 080 SEP 28	58 SEP 18	83 800 JUL 08	1 750 000	---	---	---
1983	---CCCCCCCC	MANUAL	3 340 JUL 05	15 OCT 31	42 300 JUL 12	509 000	---	---	---
1984	---CCCCCCCC	MANUAL	5 910 SEP 14	45 JUL 24	18 100 SEP 15	358 000	---	---	---
1985	---PPPPPPPP	MANUAL	2 950 SEP 18	52 JUL 15	---	---	---	---	---

MANUAL - MANUAL SAMPLING

C - COMPLETE MONTH

P - PARTIAL MONTH

* - EXTREME FOR PERIOD OF RECORD

SAND RIVER NEAR THE MOUTH - STATION NO. 05AB001

INSTANTANEOUS SUSPENDED SEDIMENT FOR 1985

DATE	TIME	WATER TEMP.	INSTANT. DISCHARGE	SINGLE VERTICAL SAMPLING	TYPE OF SAMPLER	INSTANT. CONCENT.	DISSOLVED SOLIDS	PERCENT FINER THAN INDICATED SIZE, IN MILLIMETRES											PERCENT SAND SILT CLAY	
		(C)	(m ³ /s)	(m)	(mg/L)	(mg/L)	.002	.004	.008	.015	.031	.062	.125	.250	.500	1.00	2.00			
APR 23	18:20	5.0	18.7	27.0 X	DH59	80	105													
MAY 23	13:10	13.0	53.3	23.0 X	DH59	41	146													
JUL 31	13:55	23.0	3.95	11.5 X	DH45	10	212													
OCT 01	15:30	9.0	2.34	5.5 X	DH45	5	230													

NOTE: SINGLE VERTICAL IS UNDETERMINED FOR 1985

VERTICAL SYMBOL(S): X - NOT AT REGULAR SINGLE SAMPLE VERTICAL

SAND RIVER NEAR THE MOUTH - STATION NO. OSAB001

HISTORICAL SEDIMENT DATA SUMMARY

YEAR	PERIOD OF OPERATION SUMMARY	TYPE OF SAMPLING	SAMPLED CONCENTRATION		SUSPENDED SEDIMENT LOAD		SUMMARY :		
			MAXIMUM	MINIMUM	MAXIMUM DAILY	TOTAL FOR PERIOD	MEAN LOAD	HISTORICAL MEAN LOAD	STANDARD ERROR OF MEAN
			(mg/L)	(mg/L)	(TONNES)	(TONNES)	(TONNES)	(TONNES)	OF MEAN %
	[JFMAMJJASOND]								
1984	---PPP-P----	MANUAL	180 JUN 07 *	8 AUG 30	---	---	---	---	---
1985	---PP-P--P--	MANUAL	80 APR 23	6 OCT 01 *	---	---	---	---	---

MANUAL - MANUAL SAMPLING

P - PARTIAL MONTH

* - EXTREME FOR PERIOD OF RECORD

SHEEP RIVER AT BLACK DIAMOND - STATION NO. OS2LO14

INSTANTANEOUS SUSPENDED SEDIMENT FOR 1985

DATE	TIME	WATER TEMP	INSTANT DISCHARGE	SINGLE SAMPLING OF VERTICAL	TYPE OF SAMPLER	INSTANT CONCENT.	DISSOLVED SOLIDS	PERCENT FINER THAN INDICATED SIZE, IN MILLIMETRES										PERCENT SAND SILT CLAY	
								.002	.004	.008	.016	.031	.062	.125	.250	.500	1.00	2.00	
		(C)	(m ³ /s)	(m)		(mg/L)	(mg/L)												
MAY 02	12:50	10.5	4.80 H	MID	X DH48	92	181												
MAY 24	12:45	9.5	10.5	8.0 X	DH48	118	148												
JUN 21	08:35	8.5	7.22	8.0 X	DH48	12	172												
JUL 17	14:20	13.0	3.98	8.0 X	DH48	11	195												
AUG 14	13:50	7.5	3.20 H	8.0 X	DH48	105	195												
SEP 13	14:50	4.5	46.9	26.0 X	DH59	1620	158	22	26	44	56	75	87	93	99	100		13	81 28

NOTE SINGLE VERTICAL LOCATED AT MID (MID STREAM) FOR 1985

DISCHARGE SYMBOL(S):
VERTICAL SYMBOL(S):

H - DAILY MEAN

X - NOT AT REGULAR SINGLE SAMPLE VERTICAL

SHEEP RIVER AT BLACK DIAMOND - STATION NO. OS2LO14

HISTORICAL SEDIMENT DATA SUMMARY

YEAR	PERIOD OF OPERATION SUMMARY	TYPE OF SAMPLING	SAMPLED CONCENTRATION		SUSPENDED SEDIMENT LOAD		SUMMARY :		
			MAXIMUM	MINIMUM	MAXIMUM DAILY	TOTAL FOR PERIOD	MEAN LOAD	HISTORICAL MEAN LOAD	STANDARD ERROR OF MEAN
			(mg/L)	(mg/L)	(TONNES)	(TONNES)	(TONNES)	(TONNES)	OF MEAN %
	[JFMAMJJASOND]								
1974	-----PP-PP-	MANUAL	4 JUL 28	1 OCT 01	---	---	---	---	---
1975	---P-PPPPPP--	MANUAL	180 JUN 26	1 SEP 29	---	---	---	---	---
1976	---PPPPPPPP--	MANUAL	2 730 AUG 05 *	0 SEP 24 *	---	---	---	---	---
1977	---PPPPPPPP--	MANUAL	80 SEP 26	1 JUL 25	---	---	---	---	---
1978	---PP-PP-PP--	MANUAL	727 JUN 06	3 SEP 26	---	---	---	---	---
1979	---PPPPPPPP--	MANUAL	21 MAY 30	0 AUG 20	---	---	---	---	---
1980	---PP-PP-P--	MANUAL	1 340 MAY 26	1 OCT 08	---	---	---	---	---
1981	---PPPPPPPP--	MANUAL	1 410 MAY 26	5 SEP 26	---	---	---	---	---
1982	---PPPPPPPP--	MANUAL	137 MAY 26	2 AUG 23	---	---	---	---	---
1983	---PPPPPPPP--	MANUAL	129 MAY 30	1 AUG 31	---	---	---	---	---
1984	---PP-PP-PP--	MANUAL	91 JUN 09	3 SEP 05	---	---	---	---	---
1985	---PPPPPPPP--	MANUAL	1 020 SEP 13	11 JUL 17	---	---	---	---	---

MANUAL - MANUAL SAMPLING

P - PARTIAL MONTH

* - EXTREME FOR PERIOD OF RECORD

SIFFLEUR RIVER NEAR THE MOUTH - STATION NO. OSDA002

INSTANTANEOUS SUSPENDED SEDIMENT FOR 1985

DATE	TIME	WATER TEMP	INSTANT DISCHARGE	SINGLE SAMPLING OF VERTICAL	TYPE OF SAMPLER	INSTANT CONCENT	DISSOLVED SOLIDS	PERCENT FINER THAN INDICATED SIZE, IN MILLIMETRES										PERCENT SAND SILT CLAY	
								.002	.004	.008	.016	.031	.062	.125	.250	.500	1.00		2.00
		(C)	(m ³ /s)	(m)		(mg/L)	(mg/L)												
MAY 30	13 45	7.0	15.8	WELB	X DIP	8	124												
JUN 26	13 40	7.0	11.1	10.0	DH59	2	140												
AUG 01	12 15	10.5	15.8	10.0	DH59	7	125												

NOTE SINGLE VERTICAL IS UNDETERMINED FOR 1985

VERTICAL SYMBOL(S):

X - NOT AT REGULAR SINGLE SAMPLE VERTICAL

SIFPLEUR RIVER NEAR THE MOUTH - STATION NO. OSDA002

HISTORICAL SEDIMENT DATA SUMMARY

YEAR	PERIOD OF OPERATION SUMMARY	TYPE OF SAMPLING	SAMPLED CONCENTRATION		SUSPENDED SEDIMENT LOAD		SUMMARY		
			MAXIMUM	MINIMUM	MAXIMUM DAILY	TOTAL FOR PERIOD	MEAN LOAD	HISTORICAL MEAN LOAD	STANDARD ERROR OF MEAN %
	[JFMAMJJASOND]		(mg/L)	(mg/L)	(TONNES)	(TONNES)	(TONNES)	(TONNES)	
1975	---PP-PP-P---	MANUAL	32 JUL 10	0 AUG 27 *	---	---	---	---	---
1976	---PPPPPP---	MANUAL	17 JUL 20	1 OCT 28	---	---	---	---	---
1977	---PPPPPP-P-	MANUAL	11 JUL 27	0 MAY 31	---	---	---	---	---
1978	---PPPPPP---	MANUAL	11 JUN 23	0 APR 24	---	---	---	---	---
1979	---PPPPPP---	MANUAL	29 MAY 24	0 JUN 27	---	---	---	---	---
1980	---PP-PP---	MANUAL	43 JUN 24	4 APR 22	---	---	---	---	---
1981	---PPPPPP---	MANUAL	84 JUL 29 *	2 OCT 20	---	---	---	---	---
1982	---PPPPPP---	MANUAL	11 JUL 08	2 APR 28	---	---	---	---	---
1983	---PPPPPP---	MANUAL	18 JUN 02	1 SEP 19	---	---	---	---	---
1984	---PPPPPP---	MANUAL	23 MAY 31	1 SEP 26	---	---	---	---	---
1985	---PP-P---	MANUAL	7 AUG 01	2 JUN 26	---	---	---	---	---

MANUAL - MANUAL SAMPLING

P - PARTIAL MONTH

* - EXTREME FOR PERIOD OF RECORD

SIMONETTE RIVER NEAR GOODWIN - STATION NO. OTGF001

INSTANTANEOUS SUSPENDED SEDIMENT FOR 1985

DATE	TIME	WATER TEMP. (C)	DISCHARGE (m³/s)	INSTANT. DISCHARGE	SINGLE VERTICAL SAMPLING OF	TYPE OF SAMPLER	INSTANT. CONCENT. (mg/L)	DISSOLVED SOLIDS (mg/L)	PERCENT FINER THAN INDICATED SIZE, IN MILLIMETRES										PERCENT SAND	PERCENT SILT	PERCENT CLAY
									.002	.004	.008	.015	.031	.062	.125	.250	.500	1.00	2.00		
APR 18	12:30	3.5	97.8	---	---	DM59	909	182													
APR 23	12:45	5.0	49.6	---	---	DM59	234	185	24	31	48	56	70	79	86	98	100		21	48	31
MAY 22	11:30	15.5	28.0	---	---	DM48	102	202													
JUN 20	12:15	17.0	8.89	WELB	X	DIP	19	238													
JUL 23	12:20	19.5	6.00	MID	X	DM48	3	257													
AUG 27	11:30	14.5	7.17	MID	X	DM48	7	230													
SEP 25	10:30	7.0	33.6	M	---	DM59	88	182													
OCT 29	11:25	1.0	20.9	H	---	DM59	30	202													

NOTE SINGLE VERTICAL IS UNDETERMINED FOR 1985

DISCHARGE SYMBOL(S)

VERTICAL SYMBOL(S)

H - DAILY MEAN

X - NOT AT REGULAR SINGLE SAMPLE VERTICAL

SIMONETTE RIVER NEAR GOODWIN - STATION NO. OTGF001

HISTORICAL SEDIMENT DATA SUMMARY

YEAR	PERIOD OF OPERATION SUMMARY	TYPE OF SAMPLING	SAMPLED CONCENTRATION		SUSPENDED SEDIMENT LOAD		SUMMARY		
			MAXIMUM	MINIMUM	MAXIMUM DAILY	TOTAL FOR PERIOD	MEAN LOAD	HISTORICAL MEAN LOAD	STANDARD ERROR OF MEAN %
	[JFMAMJJASOND]		(mg/L)	(mg/L)	(TONNES)	(TONNES)	(TONNES)	(TONNES)	
1974	-----P-P-	MANUAL	17 NOV 07	11 SEP 19	---	---	---	---	---
1975	---PPPPPP---	MANUAL	972 APR 29	4 AUG 19	---	---	---	---	---
1976	---PPPPPP---	MANUAL	4 300 APR 08	24 JUL 28	---	---	---	---	---
1977	---PPPPPP-P-	MANUAL	2 890 APR 11	19 OCT 28	---	---	---	---	---
1978	---PPPPPP---	MANUAL	1 200 MAY 02	8 AUG 30	---	---	---	---	---
1979	---PPPPPP---	MANUAL	3 780 JUN 16	6 OCT 30	---	---	---	---	---
1980	---P-PPPP---	MANUAL	3 480 JUN 07	40 JUL 24	---	---	---	---	---
1981	---P-P-PP---	MANUAL	467 APR 28	3 SEP 04 *	---	---	---	---	---
1982	---P-PP-P-	MANUAL	2 880 JUL 18	42 OCT 05	---	---	---	---	---
1983	---PPPPPP---	MANUAL	7 230 JUL 18 *	37 AUG 30	---	---	---	---	---
1984	---P-PPPP---	MANUAL	738 APR 17	9 AUG 29	---	---	---	---	---
1985	---PPPPPP---	MANUAL	908 APR 18	3 JUL 23	---	---	---	---	---

MANUAL - MANUAL SAMPLING

P - PARTIAL MONTH

* - EXTREME FOR PERIOD OF RECORD

SLAVE RIVER AT FITZGERALD - STATION NO. 07N8001

SUSPENDED SEDIMENT FOR 1985

LOCATION LAT 59 52 20 N LONG 111 35 00 W
 DRAINAGE AREA 606 000 km²
 TYPE OF FLOW REGULATED SINCE 1968
 TYPE OF GAUGE RECORDING

TOTAL SUSPENDED SEDIMENT LOAD 10 400 000 TONNES FOR THE PERIOD MAY 18 TO DEC 01

REMARKS

MAY				JUN				JUL				
DAY	DAILY DISCHARGE (m ³ /s)	MEAN CON-CENTRATION (mg/L)	DAILY LOAD (t)	DAILY DISCHARGE (m ³ /s)	MEAN CON-CENTRATION (mg/L)	DAILY LOAD (t)	DAILY DISCHARGE (m ³ /s)	MEAN CON-CENTRATION (mg/L)	DAILY LOAD (t)	DAY		
1	3 660 B			5 630	289 S	163 000	4 810	130 S	55 100	1		
2	3 710 B			5 500	388 S	183 000	4 880	122	51 400	2		
3	3 770 B			5 450	367 S	172 000	5 000	118 S	51 400	3		
4	4 130 B			5 280	345 S	167 000	5 110	126	56 500	4		
5	4 280 B			5 170	323 S	168 000	5 180	137 S	61 300	5		
6	4 190 B			5 200	302 S	136 000	5 190	145 S	65 000	6		
7	4 380 B			5 220	265 S	120 000	5 000	177 S	76 500	7		
8	5 020 B			5 190	245 S	110 000	4 920	287 S	122 000	8		
9	4 180 B			5 180	242 S	108 000	4 950	384	151 000	9		
10	5 600 B			5 220	220 S	104 000	4 980	282 S	120 000	10		
11	6 000 B			5 280	220 S	100 000	4 920	218 S	82 700	11		
12	5 900 E			5 340	226 S	104 000	4 930	171 S	72 800	12		
13	5 670 A			5 370	225 S	104 000	4 810	145 S	60 300	13		
14	5 650			5 380	224 S	104 000	4 850	145 S	58 300	14		
15	5 610			5 280	211 S	96 300	4 460	150 S	57 800	15		
16	5 540	642 S	307 000	5 120	200	88 500	4 270	152 S	56 100	16		
17	5 500	627 S	298 000	4 930	181	81 400	4 250	133 S	46 800	17		
18	5 390	642 S	299 000	4 780	183 S	76 700	4 280	122 S	44 800	18		
19	5 390	641 S	252 000	4 690	174 S	70 500	4 260	118 S	43 600	19		
20	5 350	684 S	214 000	4 720	163 S	66 500	4 220	104 S	37 900	20		
21	5 310	411 S	189 000	4 800	144 S	59 700	4 230	88	35 800	21		
22	5 330	381 S	166 000	4 880	128 S	54 000	4 200	80 S	32 700	22		
23	5 200	318 S	143 000	4 960	125 S	53 800	4 120	80 S	28 500	23		
24	5 180	292 S	130 000	4 980	132 S	56 800	4 030	70 S	24 400	24		
25	5 160	272 S	121 000	4 880	138 S	58 200	4 040	68 S	23 700	25		
26	5 240	243 S	110 000	4 810	136 S	55 500	4 080	73 S	25 700	26		
27	5 280	224 S	102 000	4 840	137 S	57 300	4 080	73 S	25 500	27		
28	5 300	211 S	96 600	4 880	140 S	59 000	3 910	88 S	23 000	28		
29	5 400	212 S	98 800	4 920	131 S	55 700	3 820	71 S	23 400	29		
30	5 500	233 S	111 000	4 910	132 S	56 000	3 740	66 S	21 300	30		
31	5 540	289 S	124 000				3 720	63 S	20 200	31		
TOTAL	157 280		2 761 500	152 680		2 840 700	139 030		1 667 300	TOTAL		

AUG				SEP				OCT				
DAY	DAILY DISCHARGE (m ³ /s)	MEAN CON-CENTRATION (mg/L)	DAILY LOAD (t)	DAILY DISCHARGE (m ³ /s)	MEAN CON-CENTRATION (mg/L)	DAILY LOAD (t)	DAILY DISCHARGE (m ³ /s)	MEAN CON-CENTRATION (mg/L)	DAILY LOAD (t)		DAY	
1	3 680	83 S	20 000	3 680	84 S	20 200	4 880 E	211 S	68 200			
2	3 660	66 S	20 900	3 640	66 S	20 800	4 800 E	126 S	51 800		2	
3	3 890	87 S	21 400	3 580	70 S	21 700	4 800 E	129 S	51 300		3	
4	3 720	71 S	22 800	3 580	79 S	24 400	4 410 E	126 S	48 000		4	
5	3 680	72 S	22 900	3 560	96 S	29 200	4 240 E	122 S	44 700		5	
6	3 480	74	22 200	3 570	104 S	32 100	4 180 E	118 S	43 000		6	
7	3 480	76	22 800	3 550	86 S	26 400	4 120 E	117 S	41 600		7	
8	3 470	76	22 800	3 520	86 S	20 100	4 110 E	116 S	41 200		8	
9	3 440	78	22 300	3 500	67 S	20 300	4 100 E	118 S	42 200		9	
10	3 380	72	21 000	3 480	84 S	19 100	4 100 E	113 S	40 000		10	
11	3 310	70	20 000	3 400	54 S	15 900	4 090 E	100 S	35 300		11	
12	3 180	70	19 200	3 400	48 S	14 100	4 010 E	82 S	31 800		12	
13	3 070	72	19 100	3 450	50	14 900	3 920 E	86 E	29 100		13	
14	2 990	73	18 900	3 520	80 S	16 200	3 900 E	80 E	27 000		14	
15	2 880	70 S	17 900	3 520	47 S	14 300	3 870 E	78 E	25 400		15	
16	2 950	66 S	16 800	3 440	66 S	19 800	3 820 E	73 E	24 100		16	
17	3 000	60 S	16 600	3 410	100 S	29 500	3 810 E	71 E	23 400		17	
18	3 010	58 S	14 300	3 430	75 S	22 200	3 800 E	69 E	22 700		18	
19	3 020	54 S	14 100	3 470	63 S	18 900	3 750	68 E	22 000		19	
20	3 040	53 S	13 900	3 450	75 S	22 400	3 620	68 E	21 300		20	
21	3 040	56 S	14 700	3 530	123 S	27 500	3 740	69 E	22 300		21	
22	3 080 E	53	14 000	3 520	126 S	41 800	3 620	70 E	21 600		22	
23	3 080 E	48 S	12 800	4 060 E	125 S	43 800	3 630	70 E	22 000		23	
24	3 110	45 S	12 100	4 400 E	122	46 400	3 630	71 E	22 300		24	
25	3 230	46 S	12 800	4 640 E	119 S	47 700	3 550	72 E	22 700		25	
26	3 340	66 S	19 000	4 780 E	132 S	54 500	3 640	74 E	23 300		26	
27	3 400	67 S	19 700	4 770 E	165 S	68 000	3 720	76 E	24 400		27	
28	3 440	60 S	17 800	4 760 E	201 S	82 700	3 780	79 E	25 600		28	
29	3 530	65 S	19 800	4 780 E	248 S	102 000	3 890	82 E	27 600		29	
30	3 530	68 S	21 300	4 840 E	303 S	127 000	3 950	85 E	29 000		30	
31	3 710	67 S	21 500				3 920	88 E	28 800		31	
TOTAL 102 780				114 480				123 260				TOTAL

M - MANUAL GAUGE B - ICE CONDITIONS E - ESTIMATED S - SAMPLE(S) COLLECTED THIS DAY

SLAVE RIVER AT FITZGERALD - STATION NO. 07N8001

SUSPENDED SEDIMENT FOR 1985

DEC														
DAY	DAILY DISCHARGE (m ³ /s)	MEAN CON- CENTRATION (mg/L)	DAILY LOAD (t)		DAILY DISCHARGE (m ³ /s)	MEAN CON- CENTRATION (mg/L)	DAILY LOAD (t)		DAILY DISCHARGE (m ³ /s)	MEAN CON- CENTRATION (mg/L)	DAILY LOAD (t)		DAY	
1	2 180 B	2 400	448 000										1	
2	2 120 B												2	
3	2 120 B												3	
4	2 280 B												4	
5	2 380 B												5	
6	2 370 B												6	
7	2 310 B												7	
8	2 290 B												8	
9	2 330 B												9	
10	2 380 B												10	
11	2 400 B												11	
12	2 440 B												12	
13	2 400 B												13	
14	2 390 B												14	
15	2 370 B												15	
16	2 280 B												16	
17	2 360 B												17	
18	2 440 B												18	
19	2 480 B												19	
20	2 470 B												20	
21	2 430 B												21	
22	2 390 B												22	
23	2 390 B												23	
24	2 360 B												24	
25	2 360 B												25	
26	2 360 B												26	
27	2 380 B												27	
28	2 400 B												28	
29	2 420 B												29	
30	2 440 B												30	
31	2 460 B												31	
TOTAL	73 180		448 000										TOTAL	
0 - ICE CONDITIONS														

B - ICE CONDITIONS

SLAVE RIVER AT PITZGERALD - STATION NO. 07NR001

INSTANTANEOUS SUSPENDED SEDIMENT FOR 1985

DATE	TIME	WATER		INSTANT. DISCHARGE	SINGLE SAMPLING VERTICAL	TYPE OF SAMPLER	INSTANT. CONCENT.	DISSOLVED SOLIDS	PERCENT FINER THAN INDICATED SIZE, IN MILLIMETRES-										PERCENT																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																											
		TEMP.	[m ³ /s]						[C]	[mg/L]	[mg/L]	.002	.004	.008	.016	.031	.062	.125	.250	.500	1.00	2.00	SAND	SILT CLAY																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																						
MAY 15 12 35		8.0	5550		WELB	PUMP	669																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																							

NOTE SINGLE VERTICAL LOCATED AT WELD (WATER'S EDGE LEFT BANK) FOR 1985

VERTICAL SYMBOL(S) X - NOT AT REGULAR SINGLE SAMPLE VERTICAL

CONTINUED

SLAVE RIVER AT FITZGERALD - STATION NO 07NB001 (CONTINUED)

INSTANTANEOUS SUSPENDED SEDIMENT FOR 1985

DATE	TIME	WATER	INSTANT	SINGLE	TYPE	INSTANT	DISSOLVED	PERCENT FINER THAN INDICATED SIZE, IN MILLIMETRES										PERCENT			
		TEMP.	DISCHARGE					SAMPLING	CONCENT.	SOLIDS	.002	.004	.008	.016	.031	.062	.125	.250	.500	1.00	2.00
		(C)	(m ³ /s)	(m)		(mg/L)	(mg/L)														
AUG 19	15:00		3030		WELB	PUMP	55														
AUG 20	10:00		3040		WELB	PUMP	52														
AUG 21	14:00		3040		WELB	PUMP	56														
AUG 23	13:45		3060		WELB	PUMP	48														
AUG 24	12:00		3080		WELB	PUMP	43														
AUG 25	15:00		3230		WELB	PUMP	37														
AUG 26	15:20		3230		WELB	PUMP	61														
AUG 27	15:00		3290		WELB	PUMP	69														
AUG 28	17:30		3430		WELB	PUMP	56														
AUG 29	12:30		3490		WELB	PUMP	51														
AUG 30	14:30		3610		WELB	PUMP	14 A														
AUG 31	15:00		3700		WELB	PUMP	56														
SEP 01	13:30		3890		WELB	PUMP	60														
SEP 02	14:00		3840		WELB	PUMP	65														
SEP 03	12:00		3860		WELB	PUMP	62														
SEP 04	14:00		3800		WELB	PUMP	72														
SEP 05	09:00		3820		WELB	PUMP	78														
SEP 06	10:00		3610		WELB	PUMP	78														
SEP 07	13:30		3590		WELB	PUMP	110														
SEP 08	13:30		3510		WELB	PUMP	94														
SEP 09	14:00		3480		WELB	PUMP	64														
SEP 10	12:00		3470		WELB	PUMP	84														
SEP 11	12:00		3400		WELB	PUMP	69														
SEP 12	13:00		3360		WELB	PUMP	54														
SEP 14	14:00		3510		WELB	PUMP	45														
SEP 15	12:00		3520		WELB	PUMP	46														
SEP 16	12:00		3520		WELB	PUMP	47														
SEP 17	15:00		3680		WELB	PUMP	42														
SEP 18	13:00		3430		WELB	PUMP	110														
SEP 19	14:00		3410		WELB	PUMP	72														
SEP 20	12:30		3460		WELB	PUMP	63														
SEP 21	10:30		3460		WELB	PUMP	62														
SEP 21	10:30		3440		WELB	PUMP	111														
SEP 22	15:00		3790		WELB	PUMP	123														
SEP 23	13:00		4080		WELB	PUMP	124														
SEP 25	14:10		4080		WELB	PUMP	114														
SEP 25	14:15		4640		WELB	PUMP	114														
SEP 25	14:20		4640		WELB	PUMP	118														
SEP 26	13:30		4780		WELB	PUMP	121														
SEP 27	10:00		4770		WELB	PUMP	147														
SEP 28	12:30		4760		WELB	PUMP	190														
SEP 29	12:00		4780		WELB	PUMP	222														
SEP 30	12:00		4840		WELB	PUMP	298														
OCT 01	10:00		4840		WELB	PUMP	267														
OCT 02	10:00		4800		WELB	PUMP	124														
OCT 03	12:00		4800		WELB	PUMP	129														
OCT 04	10:00		4410		WELB	PUMP	129														
OCT 05	12:30		4240		WELB	PUMP	122														
OCT 06	13:30		4180		WELB	PUMP	118														
OCT 07	13:30		4120		WELB	PUMP	118														
OCT 08	15:00		4110		WELB	PUMP	113														
OCT 08	15:30		4100		WELB	PUMP	118														
OCT 10	12:30		4100		WELB	PUMP	118														
OCT 11	12:30		4090		WELB	PUMP	101														
OCT 12	12:30		4010		WELB	PUMP	91														

NOTE SINGLE VERTICAL LOCATED AT WELB (WATER'S EDGE LEFT BANK) FOR 1985

CONCENTRATION SYMBOL(S) A - CLASSIFIED AS AN ANOMALY

SLAVE RIVER AT FITZGERALD - STATION NO 07NB001

HISTORICAL SEDIMENT DATA SUMMARY

YEAR	PERIOD	TYPE	SAMPLED		CONCENTRATION		SUSPENDED SEDIMENT LOAD		SUMMARY		
	OF										
	OPERATION	SAMPLING	MAXIMUM	MINIMUM	MAXIMUM	TOTAL	MEAN	HISTORICAL	STANDARD		
	SUMMARY					DAILY	FOR	LOAD	MEAN	ERROR	
	(JFMAMJJASOND)		(mg/L)	(mg/L)	(TONNES)		PERIOD	(TONNES)	(TONNES)	OF MEAN %	
1971	-----CCC--	MANUAL	369 AUG 04	106 OCT 21	182 000 AUG 01	5 260 000	---	---	---		
1972	-----CCCC--	MANUAL	7 610 JUN 22 *	121 SEP 18	4 640 000 JUN 22 *	44 800 000 *	365 000	365 000	---		
1973	-----PECCCP--	MANUAL	1 010 JUN 24	55 OCT 03	558 000 JUN 24	20 700 000	182 000	259 000	0.0		
1974	-----CCCC--	MANUAL	891 JUL 29	85 SEP 25	844 000 JUL 25	21 300 000	180 000	226 000	5.7		
1975	-----PECCCP--	MANUAL	558 MAY 16	66 OCT 22	238 000 MAY 16	12 300 000	73 700	187 000	0.0		
1976	-----PECCCP--	MANUAL	3 050 JUL 08	84 AUG 05	1 840 000 JUL 08	25 300 000	---	---	---		
1977	-----PECCCP--	MANUAL	720 MAY 20	28 SEP 27	384 000 MAY 19	14 600 000	88 500	184 000	5.7		
1978	-----PECCCP--	MANUAL	1 840 JUN 15	83 AUG 28	787 000 JUN 15	18 900 000	123 000	157 000	0.0		
1979	-----PECCCP--	DUAL	1 210 JUN 05	45 OCT 23	691 000 JUN 05	23 100 000	174 000	159 000	5.5		
1980	-----PECCCP--	AUTO	2 030 JUN 17	48 SEP 04	752 000 JUN 17	12 300 000	83 400	180 000	5.2		
1981	-----PECCCP--	AUTO	800 JUN 10	28 AUG 27	287 000 JUN 10	7 480 000	48 300	139 000	0.0		
1982	-----PECCCP--	AUTO	5 270 JUL 25	48 OCT 08	2 590 000 JUL 25	24 900 000	156 000	144 000	0.0		
1983	-----PECCCP--	DUAL	1 580 JUL 03	52 SEP 14	796 000 JUL 28	26 200 000	187 000	149 000	0.0		
1984	-----PECCCP--	DUAL	2 420 JUN 01	60 SEP 14	1 090 000 JUN 01	28 700 000	166 000	180 000	0.0		
1985	-----PECCCP--P	DUAL	822 MAY 16	14 AUG 30 *	448 000 DEC 01	10 400 000	50 600	143 000	3.7		

AUTO - AUTOMATIC SAMPLING

DUAL - MANUAL AND AUTOMATIC SAMPLING

MANUAL - MANUAL SAMPLING

C - COMPLETE MONTH

P - PARTIAL MONTH

* - EXTREME FOR PERIOD OF RECORD

SOUTH SASKATCHEWAN RIVER AT HIGHWAY NO. 41 - STATION NO. 05AK001

INSTANTANEOUS SUSPENDED SEDIMENT FOR 1985

DATE	TIME	WATER TEMP.	INSTANT. DISCHARGE	SINGLE SAMPLING VERTICAL	TYPE OF SAMPLER	INSTANT. CONCENT.	DISSOLVED SOLIDS	PERCENT FINER THAN INDICATED SIZE, IN MILLIMETRES										PERCENT SAND SILT CLAY			
								.002	.004	.008	.016	.031	.062	.125	.250	.500	1.00	2.00	SAND	SILT	CLAY
		[C]	[m ³ /s]	[m]		[mg/L]	[mg/L]														
MAY 08	12:00	15.0	101	70.0	X D49	52	300														
MAY 28	11:30	15.0	258	110	D49	356	183														
JUN 26	09:30	16.0	84.3	110	D49	34	205														
JUL 16	11:25	25.0	28.8	110	D49	9	255														
AUG 13	09:35	11.0	33.5	110	D49	14	280														
SEP 09	12:55	11.0	19.5	110	D49	5	266														
SEP 17	12:30	7.0	38.1	110	D49	457	315														
OCT 01	09:15	1.5	82.5	110	D49	34	268	8	12	24	31	47	63	75	90	98	100		37	51	12
OCT 29	09:09	2.0	164	110	D49	72	255														

NOTE - SINGLE VERTICAL LOCATED AT MID (MID STREAM) FOR 1985

VERTICAL SYMBOL(S): X - NOT AT REGULAR SINGLE SAMPLE VERTICAL

SOUTH SASKATCHEWAN RIVER AT HIGHWAY NO. 41 - STATION NO. 05AK001

HISTORICAL SEDIMENT DATA SUMMARY

YEAR	PERIOD OF OPERATION SUMMARY	TYPE OF SAMPLING	SAMPLING CONCENTRATION		SUSPENDED SEDIMENT LOAD		SUMMARY APR-OCT		
			MAXIMUM (mg/L)	MINIMUM (mg/L)	MAXIMUM DAILY (TONNES)	TOTAL FOR PERIOD (TONNES)	MEAN LOAD (TONNES)	HISTORICAL MEAN LOAD (TONNES)	STANDARD ERROR OF MEAN %
1966	---PCCCCCCCC	MANUAL	1 950 JUN 08	8 SEP 19	195 000 JUN 08	2 430 000	---	---	---
1967	CCCCCCCCCCCC	MANUAL	3 840 MAY 11	5 SEP 06	554 000 JUN 03	7 480 000	34 700	34 700	---
1968	CCCCCCCCCCCC	MANUAL	2 020 JUN 09	2 AUG 11	107 000 JUN 09	1 180 000	5 330	20 000	73.4
1969	CCCCCCCCCCCC	MANUAL	3 280 JUN 30	4 SEP 23	452 000 JUL 02	4 550 000	20 500	20 200	42.0
1970	CCCCCCCCCCCC	MANUAL	3 740 JUN 17	2 SEP 05 *	417 000 JUN 17	2 700 000	12 500	18 300	34.4
1971	CCCCCCCCCCCC	MANUAL	1 840 JUN 10	2 SEP 05	170 000 JUN 10	2 350 000	10 800	16 800	30.4
1972	CCCCCCCCCCCC	MANUAL	4 180 MAR 15	3 JAN 27	251 000 JUN 04	4 720 000	19 500	17 200	34.4
1973	CCCCCCCCCCCC	MANUAL	1 450 JUN 17	2 JAN 10	48 100 JUN 17	730 000	3 270	15 200	35.7
1974	CCCCCCCCCCCC	MANUAL	8 360 MAY 04	2 OCT 19	350 000 MAY 04	4 090 000	19 000	15 700	22.8
1975	CCCCCCCCCCCC	MANUAL	8 160 JUN 23 *	2 JAN 07	1 580 000 JUN 23 *	7 450 000	34 700	17 800	21.2
1976	CCCCCCCCCCCC	MANUAL	1 310 MAY 15	2 SEP 25	70 800 AUG 10	1 300 000	5 550	18 800	21.6
1977	CCCCCCCCCCCC	MANUAL	1 300 JUN 15	3 APR 29	29 800 JUN 15	120 000	455	15 100	23.8
1978	CCCCCCCCCCCC	MANUAL	1 970 JUN 03	5 AUG 13	95 700 JUN 10	2 680 000	10 400	14 500	22.1
1979	---CCCCCCCC--	MANUAL	1 720 MAY 30	2 SEP 01	102 000 MAY 30	1 180 000	5 400	14 000	22.1
1980	---CCCCCCCC--	MANUAL	4 130 MAY 30	7 SEP 02	388 000 MAY 30	2 150 000	10 100	13 800	20.9
1981	--PCCCCCCCCP--	MANUAL	4 430 MAY 19	11 SEP 22	579 000 MAY 25	4 590 000	21 400	14 300	19.1
1982	--PCCCCCCCC--	MANUAL	2 000 JUL 08	8 SEP 12	83 500 JUL 08	1 570 000	---	---	---
1983	--PCCCCCCCC--	MANUAL	2 720 JUL 21	4 SEP 25	43 900 JUL 21	415 000	1 840	13 500	19.7
1984	---CCCCCCP--	MANUAL	527 JUN 28	5 MAY 05	9 100 JUN 28	117 000	---	---	---
1985	---PPPPPP--	MANUAL	457 SEP 17	5 SEP 09	---	---	---	---	---

MANUAL - MANUAL SAMPLING

C - COMPLETE MONTH

P - PARTIAL MONTH

* - EXTREME FOR PERIOD OF RECORD

SOUTH SASKATCHEWAN RIVER AT MEDICINE HAT - STATION NO. 05AJ001

INSTANTANEOUS SUSPENDED SEDIMENT FOR 1985

DATE	TIME	WATER TEMP. [C]	INSTANT. DISCHARGE [m ³ /s]	SINGLE SAMPLING VERTICAL SAMPLER [m]	TYPE OF SAMPLER	INSTANT. CONCENT. [mg/L]	DISSOLVED SOLIDS [mg/l]	PERCENT FINER THAN INDICATED SIZE, IN MILLIMETRES										PERCENT SAND SILT CLAY				
								.002	.004	.008	.016	.031	.062	.125	.250	.500	1.00	2.00				
MAR 27	10:55	1.0	144	130	X DH59	47	317															
APR 5	10:35	2.0	148	81.0	X DH59	181	318															
APR 17	11:00	11.0	113	74.0	X DH59	85	371															
APR 29	12:25	9.0	88.1	74.0	X DH59	31	261															
MAY 29	10:55	15.0	355	75.0	X DH59	559	182	10	18	34	52	72	84	88	94	100			15	88	18	
JUN 27	11:00	19.0	101	80.0	X DH59	44	223															
JUL 31	12:00	17.0	31.1	82.0	X DH59	11	232															
AUG 28	15:50	23.0	38.3	58.0	X DH59	12	248															
SEP 17	17:30	12.0	255	105	X DH59	354	238	25	42	58	89	92	95	97	98	100			4	84	43	
SEP 18	08:30	10.0	230	108	X DH59	353	250	37	57	78	92	95	98	98	100				2	41	57	
SEP 25	15:20	11.0	93.9	74.0	X DH59	50	247															
OCT 28	12:30	7.0	165	80.0	X DH59	75	238															

NOTE - SINGLE VERTICAL LOCATED AT MID (MID STREAM) FOR 1985

CONCENTRATION SYMBOL(S): C - COARSE MATERIAL PRESENT
VERTICAL SYMBOL(S): X - NOT AT REGULAR SINGLE SAMPLE VERTICAL

ALBERTA

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SOUTH SASKATCHEWAN RIVER AT MEDICINE HAT - STATION NO. CSAJ001
HISTORICAL SEDIMENT DATA SUMMARY

YEAR	PERIOD OF OPERATION SUMMARY	TYPE OF SAMPLING	SAMPLED CONCENTRATION		SUSPENDED SEDIMENT LOAD		SUMMARY			
			MAXIMUM	MINIMUM	MAXIMUM DAILY	TOTAL FOR PERIOD (TONNES)	MEAN LOAD (TONNES)	HISTORICAL MEAN LOAD (TONNES)	STANDARD ERROR OF MEAN %	
			(mg/L)	(mg/L)	(TONNES)					
(JFMAMJJASOND)										
1974	-----PPPP--	MANUAL	88 JUL 15	9 SEP 11	---	---	---	---	---	---
1975	---PP-PP-PP--	MANUAL	2 930 JUN 23	8 SEP 15	---	---	---	---	---	---
1976	---PPPPPPPP--	MANUAL	493 MAY 11	7 MAY 05 *	---	---	---	---	---	---
1977	---P-PPPPPP--	MANUAL	53 MAY 24	11 JUN 29	---	---	---	---	---	---
1978	---PP-PP-PP--	MANUAL	645 MAR 30	11 DEC 12	---	---	---	---	---	---
1979	---P-P-PP-PP--	MANUAL	808 MAY 31	4 JUL 31	---	---	---	---	---	---
1980	---PPPP-P-P-PP--	MANUAL	3 020 MAY 29 *	24 AUG 29	---	---	---	---	---	---
1981	---P-P-PP-PP--	MANUAL	1 780 MAY 26	17 SEP 29	---	---	---	---	---	---
1982	---PP-PP-PP-PP--	MANUAL	348 JUN 23	43 OCT 27	---	---	---	---	---	---
1983	---PP-PPPP-P-PP-PP--	MANUAL	397 JUN 02	8 SEP 26	---	---	---	---	---	---
1984	---PPPP-PP-PP--	MANUAL	113 SEP 10	4 MAY 15	---	---	---	---	---	---
1985	---PPPPPPPP--	MANUAL	869 MAY 29	11 JUL 31	---	---	---	---	---	---

MANUAL - MANUAL SAMPLING

P - PARTIAL MONTH

* - EXTREME FOR PERIOD OF RECORD

STEEPBANK RIVER NEAR FORT McMURRAY - STATION NO. 07DA006
INSTANTANEOUS SUSPENDED SEDIMENT FOR 1985

DATE	TIME	WATER TEMP (C)	INSTANT DISCHARGE (m ³ /s)	SINGLE VERTICAL SAMPLING (m)	TYPE OF SAMPLER	INSTANT. CONCENT (mg/L)	DISSOLVED SOLIDS (mg/L)	PERCENT FINER THAN INDICATED SIZE, IN MILLIMETRES										PERCENT SAND SILT CLAY	
								.002	.004	.008	.015	.031	.062	.125	.250	.500	1.00		2.00
APR 30	14 25	3.0	27.5	13.0	X DH59	872	109												
JUN 18	16 50	15.0	4.12	10.0	X DH48	12	191												
AUG 20	13 25	15.0	0.868	8.0	X DH48	3	310												

NOTE: SINGLE VERTICAL IS UNDETERMINED FOR 1985

VERTICAL SYMBOL(S): X - NOT AT REGULAR SINGLE SAMPLE VERTICAL

STEEPBANK RIVER NEAR FORT McMURRAY - STATION NO. 07DA006
HISTORICAL SEDIMENT DATA SUMMARY

YEAR	PERIOD OF OPERATION	TYPE OF SAMPLING	SAMPLED CONCENTRATION		SUSPENDED SEDIMENT LOAD		SUMMARY		
	SUMMARY		MAXIMUM	MINIMUM	MAXIMUM DAILY	TOTAL FOR PERIOD	MEAN LOAD (TONNES)	HISTORICAL MEAN LOAD (TONNES)	STANDARD ERROR OF MEAN %
			(MG/L)	(MG/L)	(TONNES)	(TONNES)			
	(JFMAMJJASOND)								
1978	---PP-PP--	MANUAL	741 JUL 19	24 JUN 24					
1976	---PP-PPP-P-	MANUAL	709 APR 15	6 NOV 05	---	---	---	---	---
1977	---PPPPPPP-	MANUAL	431 APR 15	3 SEP 22	---	---	---	---	---
1978	---PPPPPPP-	MANUAL	251 MAY 01	8 JUL 24	---	---	---	---	---
1979	---PPPPPPP-	MANUAL	115 MAY 30	8 AUG 22	---	---	---	---	---
1980	---PPPPPPP-	MANUAL	126 SEP 19	6 JUN 27	---	---	---	---	---
1981	---P-PP-PP-	MANUAL	50 JUL 18	3 AUG 28	---	---	---	---	---
1982	---PP-PP-PP-	MANUAL	120 MAY 19	3 JUN 25	---	---	---	---	---
1983	---P-PP-PP-	MANUAL	11 JUN 22	3 AUG 07	---	---	---	---	---
1984	---P-PP-PP-	MANUAL	75 AUG 11	2 SEP 21 *	---	---	---	---	---
1985	---P-P-P----	MANUAL	872 APR 30 *	3 AUG 20	---	---	---	---	---

MANUAL - MANUAL SAMPLING

P - PARTIAL MONTH

* - EXTREME FOR PERIOD OF RECORD

SWAN RIVER NEAR KINUSO - STATION NO. 07BJ001

SUSPENDED SEDIMENT FOR 1985

LOCATION LAT 55 19 00 N LONG 115 24 30 W
DRAINAGE AREA 1 900 km²
TYPE OF FLOW NATURAL
TYPE OF GAUGE RECORDING

TOTAL SUSPENDED SEDIMENT LOAD 385 000 TONNES FOR THE PERIOD APR 15 TO OCT 31

REMARKS

APR				MAY				JUN				
DAY	DAILY DISCHARGE (m ³ /s)	MEAN CON-CENTRATION (mg/L)	DAILY LOAD (t)	DAILY DISCHARGE (m ³ /s)	MEAN CON-CENTRATION (mg/L)	DAILY LOAD (t)	DAILY DISCHARGE (m ³ /s)	MEAN CON-CENTRATION (mg/L)	DAILY LOAD (t)		DAY	
1	2 70 8			40 6	405 5	1 420	22 4	159	308		1	
2	7 50 8			61 5	1 080 5	5 740	18 9	109 5	178		2	
3	10 4 8			119	2 950 5	30 600	15 8	89	121		3	
4	8 91 8			155	3 900 5	48 900	13 4	75	86 8		4	
5	7 74 8			126	1 560 5	18 400	11 8	89	70 3		5	
6	5 86 8			91 4	1 120 5	8 840	10 5	85	80 4		6	
7	7 01 8			82 1	1 080 5	7 520	9 51	89	48 5		7	
8	6 47 8			78 2	918 5	8 200	8 77	84	40 8		8	
9	17 0 8			74 8	931 5	8 000	8 52	51	37 5		9	
10	20 8 8			88 8	802 5	8 770	8 44	27 5	27 0		10	
11	25 8 8			83 1	1 070 5	8 830	7 90	35	24 6		11	
12	25 2			87 7	2 540 5	14 900	7 25	31	18 4		12	
13	36 0			83 2	1 140 5	6 220	6 76	32	18 7		13	
14	81 9			59 8	959 5	4 950	8 42	41	22 7		14	
15	50 5	710 5	3 710	58 1	738 5	3 700	6 37	42	23 1		15	
16	45 7	568 5	2 310	52 9	580 5	3 020	8 10	93 5	85 1		16	
17	43 4	470 5	1 780	52 5	634 5	2 890	24 5	402	85 4		17	
18	48 9	718 5	3 030	53 5	613 5	2 830	18 3	210	332		18	
19	44 8	532 5	2 090	47 7	589 5	2 420	13 5	118	138		19	
20	43 9	617 5	2 380	41 4	522 5	1 870	11 2	81	78 4		20	
21	25 8	554	1 280	38 8	387 5	1 200	11 4	84 5	83 0		21	
22	17 5	525 5	784	31 8	328 5	898	12 5	81	88 8		22	
23	23 1	438	874	27 3	272 5	842	12 3	80	83 8		23	
24	27 0	287 5	893	24 0	192	398	20 8 A	949 5	2 450		24	
25	30 0	381	938	23 8	185 5	320	186 A	3 510 5	50 300		25	
26	40 7	892 5	2 400	22 8	180	383	100 A	1 890 5	15 900		26	
27	43 4	940 5	2 400	18 9	149 5	288	83 9 A	721 5	3 350		27	
28	43 9	710 5	2 690	18 4	184	258	39 4 A	401 5	1 370		28	
29	38 2	426 5	1 610	27 5	321 5	783	28 9	273 5	705		29	
30	37 8	379 5	1 340	28 4	354	899	22 8	163 5	318		30	
31				24 2	207 5	433					31	
TOTAL	851.98		29 907	1 735 7		189 388	726 45		77 150 1		TOTAL	

JUL				AUG				SEP				
DAY	DAILY DISCHARGE [m ³ /s]	MEAN CON- CENTRATION [mg/L]	DAILY LOAD [t]	DAILY DISCHARGE [m ³ /s]	MEAN CON- CENTRATION [mg/L]	DAILY LOAD [t]	DAILY DISCHARGE [m ³ /s]	MEAN CON- CENTRATION [mg/L]	DAILY LOAD [t]	DAY		
1	17.8	88	162	2.25	12	2.33	2.79	31	7.47	1		
2	15.2	72.8	94.8	1.95	9.8	1.35	3.49	35	10.8	2		
3	12.8	68	81.1	1.75	7	1.08	4.00	37	12.8	3		
4	11.1	87.5	94.7	1.78	6	0.81	4.05	40	14.0	4		
5	8.78	50	37.8	2.03	8	1.40	5.51	52.5	25.2	5		
6	7.27	43	27.0	2.04	8	1.59	12.1	225	235	6		
7	6.30	37	20.1	1.95	8	1.52	12.4	154	185	7		
8	5.50	30	14.3	2.21	9	1.72	8.84	47	40.4	8		
9	4.84	20	8.36	3.07	14.5	3.71	8.89	45	34.6	9		
10	4.32	15.5	5.60	3.75	17	5.51	7.86	26.5	17.7	10		
11	3.88	14	4.89	3.87	14	4.88	6.99	20	12.1	11		
12	3.62	15	4.89	3.70	11	3.82	8.22	18	8.60	12		
13	3.69	19	5.89	3.41	11	3.24	10.7	16	63.8	13		
14	3.55	21	5.51	3.47	11	3.30	55.2	1.410.5	6.720	14		
15	3.65	18	5.82	4.92	32	13.8	38.7	495.5	1.570	15		
16	3.28	10	2.83	18.1	278.5	435	25.6	220.5	487	16		
17	2.97	12.8	3.08	12.0	158	182	29.7	307	788	17		
18	2.75	13	3.09	8.17	73.8	81.5	33.8	375.5	1.100	18		
19	2.99	18	4.03	5.92	47	3.40	24.8	184.5	394	19		
20	2.41	20	4.15	4.50	35	13.9	20.2	151	254	20		
21	2.21	20	3.82	3.87	35.5	8.38	22.8	1.430.5	2.780	21		
22	1.99	18	3.09	3.41	24	7.07	60.7	1.380.5	7.240	22		
23	1.82	19	2.95	3.05	20	5.27	48.7	885	2.930	23		
24	1.91	22.5	3.83	2.72	17	4.00	47.0	675.5	2.740	24		
25	2.39	25	5.16	2.78	16	3.86	85.5	1.190.5	8.800	25		
26	4.04	21	7.33	2.31	11.5	2.20	65.0	818.5	4.590	26		
27	4.67	18.5	7.15	2.17	15	2.81	89.3	1.240.5	9.570	27		
28	4.81	16	8.72	2.07	11	1.97	61.6	827.5	3.340	28		
29	3.98	19	6.53	1.98	15.5	2.54	45.8	445.5	1.760	29		
30	3.18	18	4.95	1.88	14	2.27	36.7	275.5	872	30		
31	2.56	14	3.22	2.16	31	5.78				31		
TOTAL	180.88		594.68	119.31		781.98	884.15		85.502.57	TOTAL		

A - MANUAL GAUGE B - ICE CONDITIONS

S - SAMPLE(S) COLLECTED THIS DAY

ALBERTA

SWAN RIVER NEAR KINUSO - STATION NO. 07BJ001

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SUSPENDED SEDIMENT FOR 1985

OCT												DAY
DAY	DAILY DISCHARGE (m ³ /s)	MEAN CON- CENTRATION (mg/L)	DAILY LOAD (t)		DAILY DISCHARGE (m ³ /s)	MEAN CON- CENTRATION (mg/L)	DAILY LOAD (t)		DAILY DISCHARGE (m ³ /s)	MEAN CON- CENTRATION (mg/L)	DAILY LOAD (t)	
1	30.7	186 S	520									
2	25.9	184	387									
3	25.5	425 S	835									1
4	38.0	891 S	990									2
5	34.3	322 S	954									3
6	30.0	185 S	428									4
7	25.7	101	234									5
8	22.5	82 S	179									6
9	19.0	111	182									7
10	18.3	91	144									8
11	17.9	100	155									9
12	18.6	124	199									10
13	19.3	122	203									11
14	22.4	188	327									12
15	25.3	248 S	542									13
16	25.6	258	562									14
17	27.2	297 S	898									15
18	25.5	235	518									16
19	22.4	138 S	289									17
20	20.4	124	219									18
21	19.5	114 S	192									19
22	18.2	100	157									20
23	17.7	85	130									21
24	16.4	78	111									22
25	14.4	82	102									23
26	12.8	72	79.5									24
27	10.7	89	83.8									25
28	12.0	85 S	87.4									26
29	9.88	50	42.5									27
30	7.63 S	40	28.4									28
31	7.44 S	40	25.7									29
TOTAL	843.33		10 713.5									30
												31
												TOTAL

S - ICE CONDITIONS

S - SAMPLE(S) COLLECTED THIS DAY

TOTAL

SWAN RIVER NEAR KINUSO - STATION NO. 078J001

INSTANTANEOUS SUSPENDED SEDIMENT FOR 1985

DATE	TIME	WATER TEMP. [C]	INSTANT. DISCHARGE [m ³ /s]	SINGLE VERTICAL SAMPLING [m]	TYPE OF SAMPLER	INSTANT. CONCENT. [mg/L]	DISSOLVED SOLIDS [mg/L]	PERCENT FINER THAN INDICATED SIZE, IN MILLIMETRES										PERCENT SAND SILT CLAY			
								.002	.004	.008	.016	.031	.062	125	250	500	1.00	2.00			
APR 15	18:30	2.5	50.7	28.0	DM59	886 C	104														
APR 16	15:50	0.0	38.2	28.0	DM59	493 C															
APR 17	16:03	2.0	37.5	28.0	DM59	434 C															
APR 18	18:18	2.0	47.2	28.0	DM59	880 C	81														
APR 19	16:00	2.0	37.6	28.0	DM59	444 C															
APR 20	10:28	1.0	47.1	28.0	DM59	859 C	53														
APR 22	17:20	1.0	21.2	28.0	DM59	539 C															
APR 24	16:04	4.0	24.5	28.0	DM59	785 C															
APR 26	16:10	3.0	40.7	28.0	DM59	728 C															
APR 27	13:30	4.0	43.8	28.0	DM59	596 C	88														
APR 28	08:38	4.0	48.5	28.0	DM59	724 C															
APR 29	15:24	5.0	33.4	28.0	DM59	264 C															
APR 30	15:33	5.0	34.4	28.0	DM59	319 C															
MAY 01	16:15	5.0	38.5	28.0	DM59	442 C															
MAY 02	17:38	7.0	89.7	28.0	DM59	1230 C	105														
MAY 03	14:36	7.0	129	28.0	DM59	3330 C	113	9	11	19	26	41	63	87	98	100		37	82	11	
MAY 04	08:22	3.0	171	28.0	DM59	2800 C	107	6	10	14	20	33	50	66	87	88	100		50	40	10
MAY 05	09:00	4.0	127	28.0	DM59	1880 C	87	7	10	18	22	38	51	76	86	100		49	41	10	
MAY 05	15:40	4.0	119	28.0	DM59	1280 C	85	9	12	21	26	44	61	82	97	100		39	49	12	
MAY 06	15:45	4.0	88.3	28.0	DM59	1080 C	90	9	11	20	26	40	55	76	98	100		45	44	11	
MAY 06	16:20	4.0	83.0	28.0	DM59	1080 C	89	7	11	20	26	38	53	73	98	100		47	42	11	
MAY 07	15:16	4.0	83.8	28.0	DM59	1100 C	89	6	10	18	23	36	48	68	95	100		52	38	10	
MAY 08	16:30	4.0	75.1	28.0	DM59	854 C	85	8	12	21	28	43	57	82	99	100		43	46	12	
MAY 09	16:10	5.0	75.7	28.0	DM59	950 C	85	6	11	19	27	39	50	69	95	100		50	39	11	
MAY 10	16:00	5.0	89.2	28.0	DM59	795 C	88	9	13	22	30	42	53	73	98	100		47	40	13	
MAY 11	12:30	5.0	82.4	28.0	DM59	1020 C															
MAY 12	13:00	5.0	85.9	28.0	DM59	2610 C	93														
MAY 13	17:15	7.0	82.4	28.0	DM59	844 C															
MAY 14	15:40	7.0	81.7	28.0	DM59	812 C															
MAY 15	15:20	7.0	88.4	28.0	DM59	688 C															
MAY 16	16:10	9.0	93.9	28.0	DM59	683 C	89														
MAY 17	18:00	12.0	54.1	28.0	DM59	811 C															
MAY 18	14:10	11.0	84.8	28.0	DM59	612 C															
MAY 19	08:40	10.0	47.9	28.0	DM59	591 C	102														
MAY 20	08:28	11.0	42.2	28.0	DM59	585 C															
MAY 21	16:10	14.5	35.1	28.0	DM59	363 C	94														
MAY 21	18:40	13.0	34.5	28.0	DM59	368 C															
MAY 22	15:04	14.0	31.4	28.0	DM59	366 C	107														
MAY 22	15:05	14.0	31.4	28.0	DM59	288 C	105														
MAY 23	18:00	12.0	26.3	28.0	DM59	269 C															
MAY 25	10:00	10.0	23.8	28.0	DM59	155 C															
MAY 27	15:17	14.0	19.8	28.0	DM59	148 C	120														
MAY 28	05:56	11.0	21.6	28.0	DM59	211 C															
MAY 31	17:38	13.0	23.5	28.0	DM59	188 C	118														
MAY 31	17:40	13.0	23.5	28.0	DM59	225 C	123														
JUN 02	17:38	16.0	18.0	28.0	DM59	101 C	126														
JUN 10	15:20	16.0	8.42	28.0	DM59	29 C															
JUN 16	18:10	14.0	8.21	28.0	DM59	123 C															
JUN 21	18:00	14.0	11.7	28.0	DM59	60 C															
JUN 24	15:50	12.0	28.4	28.0	DM59	438 C															
JUN 25	18:24	8.0	188	28.0	DM59	2880 C	153	14	17	29	36	55	77	93	98	100		23	60	17	
JUN 26	15:17	10.0	109	28.0	DM59	1370 C	126	12	15	26	31	47	67	89	98	100		33	52	15	
JUN 27	10:11	13.0	49.5	28.0	DM59	761 C	106	9	12	23	31	47	68	88	99	100		34	53	13	
JUN 28	18:27	14.0	39.4	28.0	DM59	525 C	105	8	15	26	34	49	65	86	98	100		35	49	16	
JUN 29	08:20	15.0	31.2	28.0	DM59	280 C	118														
JUN 30	16:00	19.0	21.6	28.0	DM59	148 C	122														
JUN 30	16:01	19.0	21.6	28.0	DM59	142 C	126														
JUL 02	12:08	18.0	14.8	28.0	DM59	70 C															
JUL 04	18:38	22.0	10.1	28.0	DM59	55 C	142														
JUL 10	20:30	24.0	4.18	28.0	DM59	14 C															
JUL 17	19:38	20.0	2.92	28.0	DM59	10 C															
JUL 24	07:47	18.0	1.89	28.0	DM59	21 C	175														
JUL 27	14:20	19.0	4.55	28.0	DM59	18 C															
AUG 02	09:16	22.0	1.95	28.0	DM59	8 C															
AUG 02	12:00	23.0	1.95	28.0	DM59	7 C	188														
AUG 05	07:45	12.0	2.73	28.0	DM59	12 C															
AUG 18	07:15	13.0	20.1	28.0	DM59	332 C	148														
AUG 18	10:15	17.0	5.29	28.0	DM59	74 C															
AUG 21	08:55	13.0	3.87	28.0	DM59	25 C	155														
AUG 26	14:30	11.0	2.24	28.0	DM59	15 C	169														
AUG 26	14:31	11.0	2.24	28.0	DM59	14 C	163														
AUG 29	17:06	12.0	1.95	28.0	DM59	10 C	173														
SEP 05	15:20	10.0	5.93	28.0	DM59	41 C															
SEP 10	18:10	12.0	7.72	28.0	DM59	31 C	135														
SEP 14	08:30	10.0	82.5	28.0	DM59	1940 C	153	17	23	35	43	55	65	78	93	98	100		35	42	23
SEP 15	14:30	11.0	34.2	28.0	DM59	387 C															
SEP 16	17:30	8.0	23.5	28.0	DM59	183 C	111														
SEP 18	15:16	8.0	32.3	28.0	DM59	336 C	111														
SEP 19	16:06	8.0	23.7	28.0	DM59	159 C															
SEP 21	17:05	5.0	22.5	28.0	DM59	2330 C	134	8	9	14	16	26	34	43	77	98	100		55	25	8
SEP 22	17:15	4.0	84.8	28.0	DM59	1110 C	125	11	15	23	30	41	51	70	98	100		48	36	15	
SEP 24	14:00	5.0	40.5	28.0	DM59	486 C	108														
SEP 25	17:30	7.0	81.1	28.0	DM59	1070 C	120	13	20	31	38	55	67	82	97	100		33	47	20	
SEP 26	16:06	8.0	59.4	28.0	DM59	706 C	97														
SEP 27	15:30	5.5	90.1	28.0	DM59	1040 C	106														
SEP 27	16:00	7.0	85.8	28.0	DM59	552 C	95														
SEP 28	16:30	5.0	85.8	28.0	DM59	588 C	106														
SEP 29	16:30	5.0	23.4	28.0	DM59	423 C															
SEP 30	16:30	7.0	35.1	28.0</																	

SWAN RIVER NEAR KINUSO - STATION NO. 078J001

HISTORICAL SEDIMENT DATA SUMMARY

YEAR	PERIOD OF OPERATION SUMMARY	TYPE OF SAMPLING	SAMPLED CONCENTRATION		SUSPENDED SEDIMENT LOAD		SUMMARY APR-OCT		
			MAXIMUM	MINIMUM	MAXIMUM DAILY	TOTAL FOR PERIOD	MEAN LOAD	HISTORICAL MEAN LOAD	STANDARD ERROR OF MEAN
	(JFMAMJJASOND)		(mg/L)	(mg/L)	(TONNES)	(TONNES)	(TONNES)	(TONNES)	%
1969	---CCCCC--	MANUAL	2 260 SEP 05	5 JUN 30	21 300 SEP 05	70 400	---	---	---
1970	---CCCCCCCC	MANUAL	2 180 JUN 29	8 AUG 28	35 000 JUN 29	182 000	851	851	---
1971	CCCCCCCCCCCC	MANUAL	3 470 JUN 18	8 AUG 29	72 800 JUN 18	746 000	3 480	2 170	60.8
1972	CCCCCCCCCCCC	MANUAL	4 450 JUN 18	6 DEC 19	70 000 JUN 18	400 000	1 870	2 070	37.1
1973	CCCCCCCCCCCC	MANUAL	3 370 MAY 21	9 SEP 23	41 900 MAY 21	344 000	1 810	1 960	28.3
1974	CCCCCCCCCCCC	MANUAL	5 050 JUL 13	10 SEP 27	103 000 JUL 13	518 000	2 420	2 050	21.9
1975	---CCCCC--	MANUAL	4 020 AUG 31	10 OCT 29	88 700 JUN 28	544 000	2 840	2 130	17.3
1976	---PPPP--	MANUAL	1 240 JUL 03	32 OCT 08	---	---	---	---	---
1977	---PPPP--	MANUAL	871 APR 26	9 OCT 27	---	---	---	---	---
1978	---PP--	MANUAL	1 311 APR 27	18 OCT 25	---	---	---	---	---
1979	---CCCCC--	MANUAL	8 010 JUN 14	14 AUG 27	140 000 JUN 14	884 000	---	---	---
1980	---P-CCCCC--	MANUAL	1 800 JUN 05	22 JUN 18	21 700 MAY 28	151 000	705	1 930	15.3
1981	---P-CCCCC--	MANUAL	2 180 JUL 23	5 AUG 24	18 500 JUL 23	86 200	---	---	---
1982	---P-CCCCC--	MANUAL	2 240 JUL 16	1 OCT 23	25 000 JUL 16	259 000	---	---	---
1983	---P-CCCCC--	MANUAL	4 590 JUN 20	7 JUN 04	197 000 JUN 28	863 000	---	---	---
1984	---P-CCCCC--	MANUAL	3 550 JUN 08	14 AUG 02	72 400 JUN 08	248 000	---	---	---
1985	---P-CCCCC--	MANUAL	3 800 MAY 04	7 AUG 02	50 300 JUN 25	355 000	---	---	---

MANUAL - MANUAL SAMPLING

C - COMPLETE MONTH

P - PARTIAL MONTH

- - - EXTREME FOR PERIOD OF RECORD

TWIN CREEK NEAR SEEBE - STATION NO. 058F018

MONTHLY AND ANNUAL TOTAL VOLUMETRIC BED LOAD IN CUBIC METRES

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL	YEAR
1969	0	0	0	0	0.8	2.1	0	0	0	0	0	0	3.7	1969
1970	0	0	0	0	0.2	1.8	0.5	0	0	0	0	0	2.5	1970
1971	0	0	0	0	1.1	5.5	1.5	0	0	0	0	0	8.3	1971
1972	0	0	0	0	0.1	4.7	0.4	0	0	0	0	0	5.2	1972
1973	0	0	0	0	0	0.8	0	0	0	0	0	0	0.8	1973
1974	0	0	0	0	0	1.5	0	0	0	0	0	0	1.5	1974
1975	0	0	0	0	0	0.7	0	0	0	0	0	0	0.7	1975
1976	0	0	0	0	0	0.8	0	0	0	0	0	0	0.8	1976
1977	0	0	0	0	0	0.7	0	0	0	0	0	0	0.7	1977
1978	0	0	0	0	0.1	1.0	0.3	0.1	0	0	0	0	1.5	1978
MEAN	0	0	0	0	0.2	2.0	0.4	0	0	0	0	0	2.5	MEAN

BED LOAD MEASURED BY VOLUMETRIC METHOD MONTHLY DISTRIBUTION ESTIMATED

VERMILION RIVER NEAR MARWAYNE - STATION NO. 058E007

INSTANTANEOUS SUSPENDED SEDIMENT FOR 1985

DATE	TIME	WATER TEMP (C)	INSTANT DISCHARGE (m³/s)	SINGLE VERTICAL SAMPLING DEPTH (m)	TYPE OF SAMPLER	INSTANT CONCENT (mg/L)	DISSOLVED SOLIDS (mg/L)	PERCENT FINER THAN INDICATED SIZE IN MILLIMETRES										PERCENT SAND SILT CLAY
								0.02	0.04	0.06	0.075	0.085	0.15	0.25	0.425	0.60	0.85	
APR 5	11:00	0.0	8.18	8	22.0 X DH48	90	362											
APR 17	18:00	8.0	13.2		19.0 X DH48	127	345											
APR 17	18:01	8.0	13.2		19.0 X DH48	118	355											
MAY 9	14:30	15.5	5.17		4.0 X DH48	66	417											
JUN 8	10:00	18.0	1.28		14.5 X DH48	13	552											
JUN 27	15:00	19.0	0.841		7.0 X DH48	8	578											
JUL 15	17:00	23.0	0.192		MID X DIP	5	507											
AUG 15	10:40	17.0	0.014		MID X DIP	11	675											

NOTE SINGLE VERTICAL IS UNDETERMINED FOR 1985

DISCHARGE SYMBOL(S)

B - ICE CONDITIONS

VERTICAL SYMBOL(S)

X - NOT AT REGULAR SINGLE SAMPLE VERTICAL

VERMILION RIVER NEAR WARWAYNE - STATION NO. 05EE007
HISTORICAL SEDIMENT DATA SUMMARY

YEAR	PERIOD OF OPERATION SUMMARY	TYPE OF SAMPLING	SAMPLED CONCENTRATION		SUSPENDED SEDIMENT LOAD		SUMMARY		
			MAXIMUM	MINIMUM	MAXIMUM DAILY	TOTAL FOR PERIOD (TONNES)	MEAN LOAD (TONNES)	HISTORICAL MEAN LOAD (TONNES)	STANDARD ERROR OF MEAN %
			[JFMAMJJASOND]	[mg/L]	[mg/L]	[TONNES]			
1979	-----P----	MANUAL	0 AUG 21	0 AUG 21 *	--- ---	---	---	---	---
1980	--PPPPP----	MANUAL	233 APR 16 *	11 JUN 26	--- ---	---	---	---	---
1981	---PPP-----	MANUAL	26 APR 05	16 APR 28	--- ---	---	---	---	---
1982	----P--P-P-	MANUAL	77 NOV 03	33 AUG 11	--- ---	---	---	---	---
1983	----PPPPPP-	MANUAL	106 JUL 20	14 JUN 09	--- ---	---	---	---	---
1984	---PPPPPPP-	MANUAL	45 NOV 07	8 OCT 23	--- ---	---	---	---	---
1985	--PPPPP----	MANUAL	127 APR 17	9 JUL 16	--- ---	---	---	---	---
MANUAL - MANUAL SAMPLING									
P - PARTIAL MONTH									

VERMILION RIVER NEAR VEGREVILLE - STATION NO 05EE003
INSTANTANEOUS SUSPENDED SEDIMENT FOR 1985

DATE	TIME	WATER DISCHARGE (C)	INSTANT DISCHARGE (m ³ /s)	SINGLE VERTICAL SAMPLING (m)	TYPE OF SAMPLER	INSTANT CONCENT (mg/L)	DISSOLVED SOLIDS (mg/L)	PERCENT FINER THAN INDICATED SIZE, IN MILLIMETRES												PERCENT SAND SILT CLAY						
								002	004	008	016	031	062	125	250	500	1 00	2 00								
APR 26	10 00	5.0	1.71	MID	X DH59	52 G	344																			
APR 26	10 01	5.0	1.71	MID	X DH59	36	387																			
MAY 24	09 00	11.0	0.020	MID	X DH48	12	417																			
JUN 27	13 45	19.0	0.005 H	MIC	X DH48	8	543																			
NOTE SINGLE VERTICAL IS UNDETERMINED FOR 1965																										
DISCHARGE SYMBOL(S): H - DAILY MEAN																										
CONCENTRATION SYMBOL(S): E - ORGANIC MATERIAL PRESENT																										
VERTICAL SYMBOL(S): X - NOT AT REGULAR SINGLE SAMPLE VERTICAL																										

VERMILION RIVER NEAR VEGREVILLE - STATION NO 05EE003
HISTORICAL SEDIMENT DATA SUMMARY

YEAR	PERIOD OF OPERATION SUMMARY	TYPE OF SAMPLING	SAMPLED CONCENTRATION		SUSPENDED SEDIMENT LOAD		SUMMARY		
			MAXIMUM	MINIMUM	MAXIMUM DAILY	TOTAL FOR PERIOD (TONNES)	MEAN LOAD (TONNES)	HISTORICAL MEAN LOAD (TONNES)	STANDARD ERROR OF MEAN %
	(J F M A M J J A S O N D)		(mg/L)	(mg/L)	(TONNES)				
1974	-----P--	MANUAL	5 OCT 09	5 OCT 09 *	---	---	---	---	---
1975	-----P--	MANUAL	5 OCT 09	5 OCT 09	---	---	---	---	---
1976	---P-----	MANUAL	36 APR 08	19 APR 28	---	---	---	---	---
1975	---PP-----	MANUAL	44 APR 20	17 MAY 10	---	---	---	---	---
1979	---P-----	MANUAL	23 MAY 14	23 MAY 14	---	---	---	---	---
1980	---P-----	MANUAL	52 APR 18	39 APR 28	---	---	---	---	---
1981	---P-----	MANUAL	7 APR 23	5 JUL 14	---	---	---	---	---
1982	---P-----	MANUAL	68 JUL 07 *	22 AUG 12	---	---	---	---	---
1983	---P-PPPP--	MANUAL	1 JUL 05	20 SEP 28	---	---	---	---	---
1984	---PPP-----	MANUAL	55 JUN 06	17 JUL 11	---	---	---	---	---
1985	---PPP-----	MANUAL	52 APR 26	8 JUN 27	---	---	---	---	---

MANUAL - MANUAL SAMPLING

P - PARTIAL MONTH

* - EXTREME FOR PERIOD OF RECORD

WAMPUS CREEK NEAR NINTON - STATION NO. 07AF003
SUSPENDED SEDIMENT FOR 1985

LOCATION: LAT 53 09 22 N LONG 117 15 40 W
DRAINAGE AREA: 25.4 km²
TYPE OF FLOW: NATURAL
TYPE OF GAUGE: RECORDING

TOTAL SUSPENDED SEDIMENT LOAD 170 TONNES FOR THE PERIOD APR 01 TO OCT 31

REMARKS

APR				MAY				JUN				DAY
DAY	DAILY DISCHARGE (m ³ /s)	MEAN CON- CENTRATION (mg/L)	DAILY LOAD (t)	DAILY DISCHARGE (m ³ /s)	MEAN CON- CENTRATION (mg/L)	DAILY LOAD (t)	DAILY DISCHARGE (m ³ /s)	MEAN CON- CENTRATION (mg/L)	DAILY LOAD (t)	DAY		
1	0.107 B	2	0.02	0.400	31 S	1.07	0.591	4	0.20	1		
2	0.580 B	2	0.10	0.597	38 S	1.96	0.581	3 S	0.15	2		
3	0.600 B	2	0.10	0.610	30	1.58	0.492	3 S	0.13	3		
4	0.490 B	2	0.08	0.500	22 S	0.85	0.438	2 S	0.06	4		
5	0.360 B	2	0.06	0.370	20 S	0.84	0.415	4 S	0.14	5		
6	0.270 B	2	0.05	0.270	16	0.37	0.365	4 S	0.13	6		
7	0.195 B	2	0.03	0.230	11	0.22	0.374	3 S	0.10	7		
8	0.190 B	2	0.03	0.224	7 S	0.14	0.494	7 S	0.30	8		
9	0.197 B	2 S	0.03	0.224	8 S	0.16	0.380	8 S	0.26	9		
10	0.203 B	4	0.07	0.204	4 S	0.07	0.330	4 S	0.11	10		
11	0.210 B	4 S	0.07	0.202	7 S	0.12	0.303	8 S	0.21	11		
12	0.194 B	4	0.07	0.193	1 S	0.02	0.279	33 S	0.80	12		
13	0.227 B	4	0.08	0.183	1 S	0.02	0.280	8 S	0.15	13		
14	0.302 B	3	0.06	0.184	5 S	0.08	0.265	8 S	0.18	14		
15	0.390 B	4	0.13	0.183	8 S	0.13	0.253	4 S	0.09	15		
16	0.500 B	4 S	0.17	0.177	4 S	0.08	0.230	5 S	0.10	16		
17	0.179 B	1 S	0.02	0.179	0 S	0	0.213	7 S	0.13	17		
18	0.154 B	4 S	0.05	0.182	0 S	0	0.200	1 S	0.02	18		
19	0.146 B	12 S	0.15	0.184	0 S	0	0.188	4 S	0.06	19		
20	0.118 B	2 S	0.02	0.183	3 S	0.05	0.184	5 S	0.08	20		
21	0.144 B	4 S	0.05	0.181	7 S	0.11	0.178	8	0.09	21		
22	0.372 B	7 S	0.22	0.178	8 S	0.12	0.217	9	0.17	22		
23	0.183 B	3 S	0.04	0.178	5 S	0.08	0.234	13 S	0.28	23		
24	0.120 B	3	0.03	0.179	5 S	0.08	1.30	177 S	18.8	24		
25	0.110 B	5	0.05	0.497	40 S	1.72	1.77	147 S	22.5	25		
26	0.108 B	7	0.07	0.592	21 S	1.07	1.14	35 S	3.55	26		
27	0.120 B	9 S	0.09	0.495	11 S	0.47	0.822	8 S	0.57	27		
28	0.106 B	5 S	0.05	0.478	10 S	0.41	0.666	7 S	0.40	28		
29	0.129 B	7	0.08	0.730	23 S	1.45	0.572	8 S	0.44	29		
30	0.300 B	18	0.47	0.621	19 S	1.02	0.482	8	0.25	30		
31				0.554	10 S	0.48				31		
TOTAL	7.280		2.88	10.188		14.84	14.257		51.55	TOTAL		

JUL				AUG				SEP				
DAY	DAILY DISCHARGE (m ³ /s)	MEAN CON-CENTRATION (mg/L)	DAILY LOAD (t)	DAILY DISCHARGE (m ³ /s)	MEAN CON-CENTRATION (mg/L)	DAILY LOAD (t)	DAILY DISCHARGE (m ³ /s)	MEAN CON-CENTRATION (mg/L)	DAILY LOAD (t)	DAY		
1	0.418	1 S	0.04	0.091	2 S	0.02	0.265		0.02	1		
2	0.366	4	0.12	0.098		0.03	0.251	1	0.02	2		
3	0.308	8	0.21	0.093	3	0.02	0.246	1	0.02	3		
4	0.270	12 S	0.28	0.089	2 S	0.02	0.280		0.02	4		
5	0.245	13	0.28	0.087	2	0.02	0.477	21 S	0.87	5		
6	0.223	9	0.17									
7	0.204	5 S	0.09	0.085	2	0.01	0.633	11 S	0.80	6		
8	0.186	5	0.08	0.127	16	0.18	0.438			7		
9	0.179	5	0.08	0.722	111 S	6.92	0.403	1	0.04	8		
10	0.186	5	0.07	0.435	23 S	0.87	0.549	0 S	0.03	9		
				0.349	10 S	0.30	0.724	11 S	0.89	10		
11	0.186	5 S										
12	0.174	8	0.07	0.278	4 S	0.10						
13	0.193	12	0.12	0.920	17 S	1.35	0.802	8	0.55	11		
14	0.160	14 S	0.20	0.784	62 S	4.20	2.08	48 S	4.89	12		
15	0.142	13	0.19	0.800	27 S	1.40	1.47	79 S	14.2	13		
				2.13	240 S	44.2	1.18	19 S	2.41	14		
16	0.136	14	0.18					3	0.30	15		
17	0.172	10	0.15	1.81	25 S	3.82	0.908	2 S	0.16	16		
18	0.139	3 S	0.04	1.07	7	0.85	0.890	2 S	0.16	17		
19	0.141	3	0.04	0.805	3 S	0.21	0.788	3	0.20	18		
20	0.138	2	0.02	0.652	3	0.17	0.555	3 S	0.17	19		
				1.13	8	0.59	0.579	3	0.15	20		
21	0.117	2 S	0.02	0.973	3							
22	0.114	3	0.03	0.700	3 S	0.25	0.530	3	0.14	21		
23	0.160	8	0.11	0.985	2 S	0.18	0.511	3	0.13	22		
24	0.208	12	0.21	0.510	2 S	0.15	0.482	3	0.12	23		
25	0.147	8 S	0.10	0.490	2	0.09	0.551	4	0.19	24		
							0.507	4	0.18	25		
26	0.120	5	0.05									
27	0.104	3	0.03	0.440	2	0.06	0.490					
28	0.102	1 S	0.01	0.378	1	0.03	0.484	4	0.17	26		
29	0.115	2	0.02	0.345	1	0.03	0.448	4	0.17	27		
30	0.104	2	0.02	0.317	1 S	0.03	0.404	4	0.15	28		
31	0.097	2	0.02	0.301	1	0.03	0.384	4	0.14	29		
				0.305	1	0.03			0.13	30		
TOTAL	5.595		3.20	17.504		95.55	19.534		27.01	TOTAL		
B - ICE CONDITIONS				S - SAMPLE(S) COLLECTED THIS DAY				27.01				TOTAL

B - ICE CONDITIONS

S - SAMPLE(S) COLLECTED THIS DAY

WAMPUS CREEK NEAR HINTON - STATION NO. 07AF003

SUSPENDED SEDIMENT FOR 1985

OCT															
DAY	DAILY DISCHARGE (m ³ /s)	MEAN CON-CENTRATION (mg/L)	DAILY LOAD (t)		DAILY DISCHARGE (m ³ /s)	MEAN CON-CENTRATION (mg/L)	DAILY LOAD (t)		DAILY DISCHARGE (m ³ /s)	MEAN CON-CENTRATION (mg/L)	DAILY LOAD (t)		DAILY DISCHARGE (m ³ /s)	MEAN CON-CENTRATION (mg/L)	DAILY LOAD (t)
1	0.388	4	0.13												1
2	0.349	4	0.12												2
3	0.331	4 S	0.11												3
4	0.300	4	0.10												4
5	0.295	4	0.10												5
6	0.285	4	0.10												6
7	0.279 B	4	0.10												7
8	0.446 B	10	0.39												8
9	0.303 B	9 S	0.24												9
10	0.255	9	0.20												10
11	0.288	9	0.22												11
12	0.270	9	0.21												12
13	0.241	9	0.19												13
14	0.235	9	0.18												14
15	0.249	9	0.19												15
16	0.247	9	0.19												16
17	0.259	9	0.20												17
18	0.252	9	0.20												18
19	0.244	9	0.19												19
20	0.260	9	0.20												20
21	0.261	9	0.20												21
22	0.260	9	0.20												22
23	0.255	9	0.20												23
24	0.251 B	9	0.20												24
25	0.239 B	9	0.19												25
26	0.221 B	9	0.17												26
27	0.325 B	9	0.25												27
28	0.219 B	9	0.17												28
29	0.189 B	9	0.13												29
30	0.184 B	9	0.14												30
31	0.170 B	9	0.13												31
TOTAL	8.320		8.54												TOTAL

B - ICE CONDITIONS

S - SAMPLE(S) COLLECTED THIS DAY

INSTANTANEOUS SUSPENDED SEDIMENT FOR 1985

W - DAILY MEAN, ICE CONDITIONS

CONTINUED

WAMPUS CREEK NEAR HINTON - STATION NO. 07AP003 (CONTINUED)

INSTANTANEOUS SUSPENDED SEDIMENT FOR 1985

DATE	TIME	WATER INSTANT.		SINGLE SAMPLING OF VERTICAL SAMPLER	TYPE	INSTANT CONCENT.	DISSOLVED SOLIDS	PERCENT FINER THAN INDICATED SIZE, IN MILLIMETRES										PERCENT			
		TEMP.	DISCHARGE					.002	.004	.008	.016	.031	.062	.125	.250	.500	1.00	2.00	SAND	SILT	CLAY
		[C]	[m ³ /s]	[m]		[mg/L]	[mg/L]														
AUG 13	02:00		1.08	10LB	PUMP	28															
AUG 13	03:00		1.01	10LB	PUMP	28															
AUG 13	05:00		0.824	10LB	PUMP	22															
AUG 13	08:00		0.817	10LB	PUMP	18															
AUG 13	13:00		0.728	10LB	PUMP	8															
AUG 13	18:35	8.0	0.887	2.8 X	DM48	23	126														
AUG 13	19:50		0.838	10LB	PUMP	12															
AUG 14	03:50		0.887	10LB	PUMP	10															
AUG 14	09:50		0.852	10LB	PUMP	8															
AUG 14	22:50		0.894	10LB	PUMP	48															
AUG 14	23:50		0.893	10LB	PUMP	139															
AUG 15	00:50		1.09	10LB	PUMP	59															
AUG 15	01:50		1.16	10LB	PUMP	84															
AUG 15	02:50		1.22	10LB	PUMP	100															
AUG 15	03:50		1.30	10LB	PUMP	83															
AUG 15	05:50		1.54	10LB	PUMP	87															
AUG 15	08:50		1.87	10LB	PUMP	119															
AUG 15	07:50		1.87	10LB	PUMP	454															
AUG 15	08:50		2.14	10LB	PUMP	278															
AUG 15	09:50		2.08	10LB	PUMP	221															
AUG 15	11:50		2.66	10LB	PUMP	108															
AUG 15	12:50		2.97	10LB	PUMP	180															
AUG 15	13:50		2.91	10LB	PUMP	235															
AUG 15	17:50		2.85	10LB	PUMP	145															
AUG 15	19:50		2.40	10LB	PUMP	378															
AUG 15	20:20		2.40	10LB	PUMP	1520															
AUG 15	21:20		2.32	10LB	PUMP	138															
AUG 15	22:50		2.28	10LB	PUMP	105															
AUG 15	23:20		2.17	10LB	PUMP	98															
AUG 16	01:20		2.03	10LB	PUMP	80															
AUG 16	05:20		1.81	10LB	PUMP	37															
AUG 16	18:20		1.53	10LB	PUMP	18															
AUG 18	11:22		0.821	10LB	DIP	3															
AUG 22	11:18		0.707	10LB	DIP	3															
AUG 24	14:58		0.614	10LB	DIP	2															
AUG 29	08:30		0.321	10LB	DIP	1															
SEP 05	09:10		0.281	10LB	PUMP	1															
SEP 05	14:10		0.382	10LB	PUMP	18															
SEP 05	17:10		0.856	10LB	PUMP	17															
SEP 05	19:10		0.907	10LB	PUMP	88															
SEP 05	21:10		0.852	10LB	PUMP	79															
SEP 05	23:10		0.820	10LB	PUMP	53															
SEP 06	00:10		0.884	10LB	PUMP	41															
SEP 06	01:10		0.850	10LB	PUMP	29															
SEP 06	02:10		0.824	10LB	PUMP	23															
SEP 06	05:10		0.747	10LB	PUMP	15															
SEP 08	11:01		0.493	10LB	DIP	0															
SEP 10	14:55	8.0	0.600	3.8 X	DM48	14	111														
SEP 12	00:50		0.799	10LB	PUMP	4															
SEP 12	03:50		0.791	10LB	PUMP	4															
SEP 12	06:50		0.778	10LB	PUMP	5															
SEP 12	09:38		0.785	10LB	PUMP	2															
SEP 12	09:50		0.785	10LB	PUMP	5															
SEP 12	13:50		0.839	10LB	PUMP	20															
SEP 12	15:00		0.804	10LB	PUMP	3															
SEP 12	16:00		1.00	10LB	PUMP	4															
SEP 12	17:00		1.22	10LB	PUMP	9															
SEP 12	18:00		1.48	10LB	PUMP	18															
SEP 12	19:00		1.77	10LB	PUMP	52															
SEP 12	20:00		2.08	10LB	PUMP	100															
SEP 12	21:00		2.31	10LB	PUMP	159															
SEP 12	22:00		2.48	10LB	PUMP	269															
SEP 12	23:00		2.49	10LB	PUMP	239															
SEP 13	00:00		2.81	10LB	PUMP	236															
SEP 13	01:00		2.58	10LB	PUMP	253															
SEP 13	02:00		2.50	10LB	PUMP	197															
SEP 13	03:00		2.46	10LB	PUMP	171															
SEP 13	04:00		2.48	10LB	PUMP	143															
SEP 13	05:00		2.34	10LB	PUMP	118															
SEP 13	06:00		2.25	10LB	PUMP	85															
SEP 13	07:00		2.23	10LB	PUMP	78															
SEP 13	08:00		2.22	10LB	PUMP	59															
SEP 13	09:00		2.21	10LB	PUMP	55															
SEP 13	10:00		2.18	10LB	PUMP	48															
SEP 13	11:00		2.17	10LB	PUMP	41															
SEP 13	12:00		2.12	10LB	PUMP	37															
SEP 13	13:00		2.07	10LB	PUMP	41															
SEP 13	14:00		1.86	10LB	PUMP	32															
SEP 13	15:00		1.81	10LB	PUMP	24															
SEP 13	17:00		1.56	10LB	PUMP	27															
SEP 13	18:00		1.81	10LB	PUMP	28															
SEP 13	19:00		1.78	10LB	PUMP	83															
SEP 13	23:00		1.57	10LB	PUMP	46															
SEP 14	04:00		1.58	10LB	PUMP	37															
SEP 14	14:00		1.41	10LB	PUMP	11															
SEP 14	19:00		1.38	10LB	PUMP	7															
SEP 16	04:00		0.956	10LB	PUMP	2															
SEP 17	04:00		0.850	10LB	PUMP	2															
SEP 18	18:15		0.889	10LB	DIP	3															
OCT 03	11:04		0.333	10LB	DIP	8															
OCT 05	14:40	0.0	0.284	10LB X	DIP	8	111														

NOTE SINGLE VERTICAL LOCATED AT MID (MID STREAM) FOR 1985

VERTICAL SYMBOL(S) X - NOT AT REGULAR SINGLE SAMPLE VERTICAL

WAMPUS CREEK NEAR HINTON - STATION NO. 07AF003
HISTORICAL SEDIMENT DATA SUMMARY

YEAR	PERIOD OF OPERATION SUMMARY	TYPE OF SAMPLING	SAMPLED CONCENTRATION		SUSPENDED SEDIMENT LOAD		SUMMARY - APR-OCT		
			MAXIMUM	MINIMUM	MAXIMUM DAILY	TOTAL FOR PERIOD	MEAN LOAD (TONNES)	HISTORICAL MEAN LOAD (TONNES)	STANDARD ERROR OF MEAN %
			(mg/L)	(mg/L)	(TONNES)	(TONNES)			
[JFMAMJJASOND]									
1967	----CCCC--	MANUAL	150 JUN 08	0 SEP 08 *	85.9 JUN 09	150	---	---	---
1968	----CCCC--	MANUAL	43 MAY 10	1 SEP 18	9.70 JUL 22	78.9	---	---	---
1969	----CCCC--	MANUAL	1 090 AUG 05	0 SEP 24	752 AUG 05	1 970	---	---	---
1970	----CCCC--	MANUAL	187 MAY 10	1 SEP 08	47.5 JUN 15	185	---	---	---
1971	----CCCC--	MANUAL	408 JUN 09	3 AUG 18	186 JUN 09	592	2.77	2.77	---
1972	----CCCC--	MANUAL	552 JUN 25	1 AUG 23	335 JUN 25	738	---	---	---
1973	----CCCC--	MANUAL	301 MAY 15	1 SEP 18	135 MAY 15	754	3.53	3.15	12.1
1974	----CCCC--	MANUAL	130 JUL 12	3 JUL 03	13.7 MAY 05	175	0.82	2.37	34.1
1975	----CCCC--	MANUAL	108 MAY 08	2 JUL 29	8.87 MAY 08	57.9	0.32	1.85	41.3
1976	----CCCC--	MANUAL	111 JUN 15	3 JUL 27	11.5 JUN 15	98.0	0.45	1.58	41.5
1977	----CCCC--	MANUAL	530 MAY 11	3 APR 21	233 MAY 29	1 340	5.25	2.35	40.1
1978	----CCCC--	MANUAL	414 MAY 15	4 SEP 01	145 MAY 15	484	2.17	2.33	34.3
1979	----CCCC--	MANUAL	135 JUN 20	0 JUL 19	12.1 JUN 20	73.3	---	---	---
1980	----CCCC--	MANUAL	282 JUN 17	1 SEP 10	1 830 JUN 04 *	2 500 *	---	---	---
1981	----CCCC--	MANUAL	237 MAY 15	1 MAY 05	40.2 JUL 30	252	---	---	---
1982	----CCCCCP	MANUAL	1 010 JUL 04	1 JUN 17	354 JUL 04	812	3.80	2.52	28.4
1983	----CCCCCP	MANUAL	275 JUN 24	0 JUL 29	30.5 JUN 24	95.8	0.45	2.29	29.3
1984	----CCCCCP	MANUAL	288 MAY 15	0 MAY 12	13.5 JUN 08	109	0.51	2.11	29.7
1985	----CCCC--	MANUAL	1 520 AUG 15 *	0 APR 20	44.2 AUG 15	170	0.80	1.89	25.1

MANUAL - MANUAL SAMPLING

C - COMPLETE MONTH

P - PARTIAL MONTH

* - EXTREME FOR PERIOD OF RECORD

WASKATENAU CREEK NEAR WASKATENAU - STATION NO. 05EC002

INSTANTANEOUS SUSPENDED SEDIMENT FOR 1985

DATE	TIME	WATER TEMP.	INSTANT DISCHARGE	SINGLE TYPE SAMPLING	INSTANT CONCENT.	DISSOLVED SOLIDS	PERCENT FINER THAN INDICATED SIZE, IN MILLIMETRES										PERCENT SAND SILT CLAY
		(C)	(m ³ /s)	VERTICAL SAMPLER	(mg/L)	(mg/L)	.002	.004	.008	.015	.031	.062	.125	.250	.500	1.00	2.00
APR 24	15:00	8.0	0.457	MID X BH48	9	390											
MAY 22	14:10	20.0	0.088	MID X BH48	11	390											
JUN 25	15:00	17.0	0.110	MID X DIP	8	380											

NOTE: SINGLE VERTICAL IS UNDETERMINED FOR 1985

VERTICAL SYMBOL(S): X - NOT AT REGULAR SINGLE SAMPLE VERTICAL

WASKATENAU CREEK NEAR WASKATENAU - STATION NO. 05EC002

HISTORICAL SEDIMENT DATA SUMMARY

YEAR	PERIOD OF OPERATION SUMMARY	TYPE OF SAMPLING	SAMPLED CONCENTRATION		SUSPENDED SEDIMENT LOAD		SUMMARY		
			MAXIMUM	MINIMUM	MAXIMUM DAILY	TOTAL FOR PERIOD	MEAN LOAD (TONNES)	HISTORICAL MEAN LOAD (TONNES)	STANDARD ERROR OF MEAN %
			(mg/L)	(mg/L)	(TONNES)	(TONNES)			
1974	-----PP----	MANUAL	7 AUG 14	5 SEP 19	---	---	---	---	---
1975	-----PPPP--	MANUAL	3 JUL 14	1 SEP 10	---	---	---	---	---
1976	-----PPPP--	MANUAL	159 APR 04 *	8 MAY 20	---	---	---	---	---
1977	-----PPPP--	MANUAL	8 APR 18	1 AUG 08	---	---	---	---	---
1978	-----PPPP--	MANUAL	24 APR 13	2 JUL 27	---	---	---	---	---
1979	-----PPPP--	MANUAL	75 APR 22	0 AUG 23 *	---	---	---	---	---
1980	---P-PPPP---	MANUAL	7 APR 23	5 JUL 14	---	---	---	---	---
1981	---P-PPPP---	MANUAL	12 MAY 27	12 MAY 27	---	---	---	---	---
1982	---P-PPPP---	MANUAL	8 APR 27	9 APR 27	---	---	---	---	---
1985	---PPP-----	MANUAL	11 MAY 22	5 APR 24	---	---	---	---	---

MANUAL - MANUAL SAMPLING

P - PARTIAL MONTH

* - EXTREME FOR PERIOD OF RECORD

WATERTON RIVER NEAR GLENWOOD - STATION NO. 05AD028

INSTANTANEOUS SUSPENDED SEDIMENT FOR 1985

DATE	TIME	WATER TEMP. [C]	INSTANT. DISCHARGE (m ³ /s)	SINGLE SAMPLING VERTICAL [m]	TYPE OF SAMPLER	INSTANT. CONCENT. [mg/L]	DISSOLVED SOLIDS [mg/L]	PERCENT FINER THAN INDICATED SIZE, IN MILLIMETRES										PERCENT	
								.002	.004	.008	.015	.031	.062	.125	.250	.500	1.00	2.00	SAND
APR 03	13:20	8.0	2.27	MID	X DIP	12	188												
MAY 01	12:10	8.0	1.70	MID	X DIP	2	159												
MAY 29	12:10	11.0	77.2	MID	X DHS9	53	108												
JUN 24	10:30	13.0	2.07	20.0	X DIP	2	178												
JUN 24	10:31	13.0	2.07	20.0	X DIP	9	170												
JUL 30	12:00	20.0	2.9	MID	X DIP	8	143												
AUG 28	14:45	17.0	1.2	MID	X DIP	2	155												
SEP 24	18:30	8.0	1.55	MID	X DIP	17	195												
OCT 29	11:40	3.0	32.0	MID	X DHS9	47	128												

NOTE: SINGLE VERTICAL LOCATED AT MID (MID STREAM) FOR 1985

VERTICAL SYMBOL(S): X - NOT AT REGULAR SINGLE SAMPLE VERTICAL

WATERTON RIVER NEAR GLENWOOD - STATION NO. 05AD028

HISTORICAL SEDIMENT DATA SUMMARY

YEAR	PERIOD OF OPERATION SUMMARY	TYPE OF SAMPLING	SAMPLED CONCENTRATION		SUSPENDED SEDIMENT LOAD		SUMMARY		
			MAXIMUM [mg/L]	MINIMUM [mg/L]	MAXIMUM DAILY [TONNES]	TOTAL FOR PERIOD [TONNES]	MEAN LOAD [TONNES]	HISTORICAL MEAN LOAD [TONNES]	STANDARD ERROR OF MEAN %
1974	-----P-PP--	MANUAL	5 JUL 24	1 OCT 08	---	---	---	---	---
1975	---PPP-PPP-	MANUAL	124 MAY 13	0 SEP 03 *	---	---	---	---	---
1976	---PPPPPPP-	MANUAL	43 APR 14	4 JUL 29	---	---	---	---	---
1977	---PPPPPPP-	MANUAL	29 OCT 18	2 APR 28	---	---	---	---	---
1978	---PPPPPPP-P	MANUAL	1 120 MAY 17 *	2 NOV 02	---	---	---	---	---
1979	---PPPPPPP--	MANUAL	113 MAY 30	0 JUL 28	---	---	---	---	---
1980	---PPPPPP-PP-	MANUAL	188 MAY 08	3 JUL 31	---	---	---	---	---
1981	---PPPPPPP-P-	MANUAL	233 MAY 27	3 AUG 24	---	---	---	---	---
1982	---PPPPPPP--	MANUAL	42 JUN 23	1 AUG 28	---	---	---	---	---
1983	---PPPPPPP-P-	MANUAL	151 MAY 30	4 JUL 28	---	---	---	---	---
1984	---PPPPPPP--	MANUAL	36 JUN 28	3 MAY 01	---	---	---	---	---
1985	---PPPPPPP--	MANUAL	53 MAY 29	2 MAY 01	---	---	---	---	---

MANUAL - MANUAL SAMPLING

P - PARTIAL MONTH

* - EXTREME FOR PERIOD OF RECORD

WEST PRAIRIE RIVER NEAR HIGH PRAIRIE - STATION NO. 07BF002

INSTANTANEOUS SUSPENDED SEDIMENT FOR 1985

DATE	TIME	WATER TEMP. [C]	INSTANT. DISCHARGE (m ³ /s)	SINGLE SAMPLING VERTICAL [m]	TYPE OF SAMPLER	INSTANT. CONCENT. [mg/L]	DISSOLVED SOLIDS [mg/L]	PERCENT FINER THAN INDICATED SIZE, IN MILLIMETRES										PERCENT			
								.002	.004	.008	.015	.031	.062	.125	.250	.500	1.00	2.00	SAND	SILT	CLAY
APR 25	12:55	4.0	18.3	MID	X DHS9	979	137	13	18	30	40	54	65	77	94	100			35	47	18
MAY 05	13:45	8.0	31.7	20.0	X DHS9	140	144	14	18	29	37	57	65	78	94	100			35	47	18
MAY 24	12:00	13.5	3.89	14.0	X DHS9	72	194														
JUN 25	14:25	20.0	1.09	MID	X DHS9	14	203														
JUL 25	13:40	22.0	0.208	8.5	X DHS9	6	308														
AUG 29	15:15	20.0	0.482	14.0	X DHS9	19	280														
SEP 24	10:40	8.8	13.8	19.0	X DHS9	637	186	22	34	50	60	69	75	84	97	100			35	41	24

NOTE: SINGLE VERTICAL IS UNDETERMINED FOR 1985

VERTICAL SYMBOL(S): X - NOT AT REGULAR SINGLE SAMPLE VERTICAL

WEST PRAIRIE RIVER NEAR HIGH PRAIRIE - STATION NO. 07BFO02
HISTORICAL SEDIMENT DATA SUMMARY

YEAR	PERIOD OF OPERATION SUMMARY	TYPE OF SAMPLING	SAMPLED CONCENTRATION		SUSPENDED SEDIMENT LOAD		SUMMARY :		
			MAXIMUM	MINIMUM	MAXIMUM DAILY	TOTAL FOR PERIOD	MEAN LOAD	HISTORICAL MEAN LOAD	STANDARD ERROR OF MEAN %
	(JFMAMJJASOND)		(mg/L)	(mg/L)	(TONNES)	(TONNES)	(TONNES)	(TONNES)	
1974	---PP---P---	MANUAL	3 280 APR 23	13 AUG 28	---	---	---	---	---
1975	---PPP-PP---	MANUAL	1 830 APR 28	22 SEP 28	---	---	---	---	---
1976	---PPPPPP---	MANUAL	6 830 JUN 27	47 OCT 28	---	---	---	---	---
1977	---PPPPPP---	MANUAL	2 430 APR 13	15 SEP 21	---	---	---	---	---
1978	---PPPP---	MANUAL	76 SEP 27	13 AUG 28	---	---	---	---	---
1979	---PPPPPP---	MANUAL	4 250 JUL 04	26 SEP 19	---	---	---	---	---
1980	---PPPPPP---	MANUAL	341 JUN 03	19 OCT 27	---	---	---	---	---
1981	---P-P-P---	MANUAL	253 MAY 27	10 JUL 07	---	---	---	---	---
1982	---PP-P-P---	MANUAL	1 280 MAY 03	40 OCT 04	---	---	---	---	---
1983	---P-PPPP---	MANUAL	8 800 JUL 28 *	33 OCT 24	---	---	---	---	---
1984	---PPPP-P---	MANUAL	5 730 JUN 09	7 SEP 04	---	---	---	---	---
1985	---PPPPPP---	MANUAL	2 140 MAY 05	6 JUL 25 *	---	---	---	---	---

MANUAL - MANUAL SAMPLING

P - PARTIAL MONTH

* - EXTREME FOR PERIOD OF RECORD

WEST STREETER CREEK NEAR NANTON - STATION NO. 05AB022

MONTHLY AND ANNUAL TOTAL VOLUMETRIC BED LOAD IN CUBIC METRES

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL	YEAR
1985	0	0	0	0	0	0	0	0	0	0	0	0	0	1985
1986	0	0	0	0	0	0	0	0	0	0	0	0	0	1986
1987	0	0	0	0	0	0	0	0	0	0	0	0	0	1987
MEAN	0	0	0	0	0	0	0	0	0	0	0	0	0	MEAN

BED LOAD MEASURED BY VOLUMETRIC METHOD. MONTHLY DISTRIBUTION ESTIMATED.

WILLOW CREEK ABOVE CHAIN LAKES - STATION NO. 05AB028

INSTANTANEOUS SUSPENDED SEDIMENT FOR 1985

DATE	TIME	WATER TEMP.	INSTANT. DISCHARGE	SINGLE SAMPLING VERTICAL	TYPE OF SAMPLER	INSTANT. CONCENT.	DISSOLVED SOLIDS	PERCENT FINER THAN INDICATED SIZE, IN MILLIMETRES										PERCENT SAND SILT CLAY						
								(C)	(m ³ /s)	(m)	(mg/L)	(mg/L)	.002	.004	.008	.016	.031	.062	.125	.250	.500	1.00	2.00	
MAY 01	14:10	11.0	0.828	3.7	X DIP	2	206																	
MAY 23	12:40	16.0	0.780	1.0	X DIP	20	189																	
MAY 27	13:10	13.0	1.22	1.0	X DIP	10	189																	
JUN 05	11:50	11.0	1.83	4.0	X DIP	5	146																	
JUN 21	12:45	16.0	0.578	2.0	X DIP	2	186																	
JUL 11	08:00	16.0	0.087	1.0	X DIP	31	173																	
JUL 29	08:20	16.0	0.045	0.5	X DIP	22	182																	
AUG 23	13:30	19.0	0.828	WELB	X DIP	8	190																	
SEP 18	10:05	8.0	2.07	5.0	X DH48	6	183																	
OCT 01	11:15	8.0	1.43	1.0	X DIP	3	179																	

NOTE : SINGLE VERTICAL LOCATED AT MID (MID STREAM) FOR 1985

VERTICAL SYMBOL(S): X - NOT AT REGULAR SINGLE SAMPLE VERTICAL

ALBERTA

WILLOW CREEK ABOVE CHAIN LAKES - STATION NO. 05AB028

HISTORICAL SEDIMENT DATA SUMMARY

YEAR	PERIOD OF OPERATION SUMMARY	TYPE OF SAMPLING	SAMPLED CONCENTRATION		SUSPENDED SEDIMENT LOAD		SUMMARY : JAN-DEC		
			MAXIMUM	MINIMUM	MAXIMUM DAILY	TOTAL FOR PERIOD	MEAN LOAD	HISTORICAL MEAN LOAD	STANDARD ERROR OF MEAN %
	(JFMAMJJASOND)		(mg/L)	(mg/L)	(TONNES)	(TONNES)	(TONNES)	(TONNES)	
1966	-----CCCC--	MANUAL	1 890 JUN 17	1 AUG 15	2 230 JUN 18	5 410	---	---	---
1966	--CCCCCCCCC	MANUAL	1 400 JUN 04	1 JUL 27	872 JUN 05	2 330	---	---	---
1967	CCCCCCCCCCCC	MANUAL	1 350 MAY 21	2 AUG 01	7 180 MAY 31 *	30 800 *	84.6	84.6	---
1968	CCCCCCCCCCCC	MANUAL	190 APR 01	1 JUL 17	84.4 JUN 07	586	1.80	43.1	96.3
1969	CCCCCCCCCCCC	MANUAL	2 080 JUN 28 *	0 JUL 24 *	4 890 JUN 29	18 700	51.3	45.6	52.7
1970	CCCCCCCCCCCC	MANUAL	1 780 MAY 05	0 SEP 17	801 MAY 05	3 300	9.04	35.8	52.9
1971	CCCCCCCCCCCC	MANUAL	178 JUN 08	0 JUN 22	180 JUN 08	858	1.80	29.7	55.7
1972	CCCCCCCCCCCC	MANUAL	91 MAY 15	0 JUN 21	68.5 MAY 14	1 130	3.09	25.2	55.4
1973	CCCCCCCCCCCC	MANUAL	364 MAY 25	0 NOV 19	340 MAY 28	1 250	3.41	22.1	55.2
1974	CCCCCCCCCCCC	MANUAL	255 APR 28	0 JAN 21	374 APR 27	1 710	4.87	19.9	55.1
1975	CCCCCCCCCCCC	MANUAL	1 390 JUN 20	1 JAN 08	4 820 JUN 20	8 930	24.6	20.4	47.5
1976	CCCCCCCCCCCC	MANUAL	860 AUG 06	0 SEP 20	1 180 AUG 05	3 980	8.13	19.2	45.8
1977	CCCCCCCCCCCC	MANUAL	28 APR 05	1 JUN 12	2.31 APR 08	45.9	0.13	17.5	45.3
1978	PPPPPPPPPP--	MANUAL	40 MAR 17	0 JAN 03	---	---	---	---	---
1980	---PPPPPP-P-	MANUAL	29 MAY 29	4 AUG 28	---	---	---	---	---
1981	--P-PP-PPP--	MANUAL	413 MAY 22	4 SEP 02	---	---	---	---	---
1982	---PPPP-P---	MANUAL	44 JUN 07	1 SEP 14	---	---	---	---	---
1983	---PPPP-P---	MANUAL	40 MAY 25	2 JUL 18	---	---	---	---	---
1984	---PPPP-----	MANUAL	28 APR 05	1 MAY 01	---	---	---	---	---
1985	----PPPPPP--	MANUAL	31 JUL 11	2 MAY 01	---	---	---	---	---

MANUAL - MANUAL SAMPLING

C - COMPLETE MONTH

P - PARTIAL MONTH

* - EXTREME FOR PERIOD OF RECORD

WILLOW CREEK NEAR CLARESDOLM - STATION NO. 05AB021

INSTANTANEOUS SUSPENDED SEDIMENT FOR 1985

DATE	TIME	WATER TEMP.	INSTANT. DISCHARGE	SINGLE SAMPLING VERTICAL	TYPE OF SAMPLER	INSTANT. CONCENT.	DISSOLVED SOLIDS	PERCENT FINER THAN INDICATED SIZE, IN MILLIMETRES										PERCENT		
								.002	.004	.008	.018	.031	.062	.125	.250	.500	1.00	2.00	SAND	SILT
		[C]	[m ³ /s]	[m]		[mg/L]	[mg/L]													
MAY 02	13:15	14.0	0.885	MID	X DH48	9	290													
MAY 31	12:00	14.0	1.48	MID	X DH48	12	274													
JUL 02	12:00	19.0	0.050	MID	X DIP	11	243													
JUL 29	10:45	20.0	0.130	MID	X DIP	8	201													
AUG 28	09:30	17.0	0.245	MID	X DH48	8	204													
SEP 23	11:50	8.0	1.34	MID	X DH48	8	288													
NOV 01	09:35	1.0	1.33	MID	X DH48	3	264													

NOTE : SINGLE VERTICAL LOCATED AT MID (MID STREAM) FOR 1985

VERTICAL SYMBOL(S): X - NOT AT REGULAR SINGLE SAMPLE VERTICAL

WILLOW CREEK NEAR CLARESHOLM - STATION NO. 05A8021

HISTORICAL SEDIMENT DATA SUMMARY

YEAR	PERIOD OF OPERATION SUMMARY	TYPE OF SAMPLING	SAMPLED CONCENTRATION		SUSPENDED SEDIMENT LOAD		SUMMARY : JAN-DEC		
			MAXIMUM	MINIMUM	MAXIMUM DAILY	TOTAL FOR PERIOD	MEAN LOAD	HISTORICAL MEAN LOAD	STANDARD ERROR OF MEAN %
			(mg/L)	(mg/L)	(TONNES)	(TONNES)	(TONNES)	(TONNES)	
(JFMAMJJASOND)									
1964	---CCCCCCCC	MANUAL	3 150 MAY 08	13 OCT 15	7 800 MAY 07	59 100	---	---	---
1965	CCCCCCCCCCCC	MANUAL	3 050 JUN 18	3 SEP 17	9 850 JUN 18	27 000	73.9	73.9	---
1966	CCCCCCCCCCCC	MANUAL	2 280 JUN 05	4 AUG 25	5 580 JUN 05	23 800	55.2	59.5	5.3
1967	CCCCCCCCCCCC	MANUAL	4 450 MAY 31	8 SEP 22	31 300 MAY 31	139 000	381	173	80.0
1968	CCCCCCCCCCCC	MANUAL	837 JUN 12	5 AUG 30	537 JUN 08	3 520	9.89	132	63.7
1969	CCCCCCCCCCCC	MANUAL	4 540 JUN 25	0 SEP 29 *	40 800 JUN 30 *	216 000 *	581	224	50.2
1970	CCCCCCCCCCCC	MANUAL	2 890 JUN 14	0 OCT 23	12 300 JUN 14	28 000	75.8	200	47.5
1971	CCCCCCCCCCCC	MANUAL	1 030 JUN 07	2 NOV 01	2 020 JUN 07	10 200	27.8	175	48.0
1972	CCCCCCCCCCCC	MANUAL	2 060 MAR 11	0 OCT 02	5 980 MAY 28	44 100	121	188	43.5
1973	CCCCCCCCCCCC	MANUAL	779 MAY 27	1 OCT 05	2 080 MAY 27	10 200	27.8	183	43.3
1974	CCCCCCCCCCCC	MANUAL	2 410 MAY 01	1 OCT 18	5 540 MAY 01	38 700	108	148	40.2
1975	PPPPPPPPPPPP	MANUAL	5 210 JUN 20 *	8 JAN 05	---	---	---	---	---
1976	--PPPPPP--P-	MANUAL	288 AUG 12	4 NOV 03	---	---	---	---	---
1977	---PPPPPP--	MANUAL	19 APR 13	1 OCT 31	---	---	---	---	---
1978	--PPPPPP--	MANUAL	784 MAR 28	2 OCT 30	---	---	---	---	---
1979	---PPPPPP--	MANUAL	121 MAY 28	0 AUG 20	---	---	---	---	---
1980	--PPPP--P-P-	MANUAL	187 APR 14	5 JUL 28	---	---	---	---	---
1981	--PPPPPP--	MANUAL	1 570 MAY 23	5 OCT 28	---	---	---	---	---
1982	---PPPPPP--	MANUAL	130 APR 23	5 SEP 27	---	---	---	---	---
1983	---PP-PP--	MANUAL	28 JUN 24	4 OCT 31	---	---	---	---	---
1984	--PP-PP----	MANUAL	9 JUL 30	3 JUN 28	---	---	---	---	---
1985	---P-PPP-P-	MANUAL	12 MAY 31	3 NOV 01	---	---	---	---	---

MANUAL - MANUAL SAMPLING

C - COMPLETE MONTH

P - PARTIAL MONTH

* - EXTREME FOR PERIOD OF RECORD

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